



TRACK & CARD ROOM TRAFFIC IMPACT STUDY

Prepared for:

Tillman & Associates Engineering, LLC

Prepared by:

ESRP CORPORATION



Engineering | Science | Research | Planning

JULY 2014

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APPROVED ON: _____



PROFESSIONAL ENGINEER CERTIFICATION

I hereby certify that I am a Professional Engineer, properly registered in the State of Florida for practicing with ESRP CORPORATION.

ESRP CORPORATION is authorized to offer engineering services to the public (through a duly licensed Professional Engineer) by the State of Florida Department of Professional Regulation - Board of Professional Engineers. ESRP holds the Florida Board of Professional Engineers' Certificate of Authorization No. 29196.

I am qualified to accomplish work in the areas of Transportation, Traffic and Civil Engineering. I have prepared or been in responsible charge of the analysis, findings, opinions, conclusions and/or technical advice included in the attached report which is in connection to:

- PROJECT: **Track & Card Room - Traffic Impact Study**
- LOCATION: **Marion County, Florida**
- CLIENT: **Tillman & Associates Engineering, LLC**

I hereby acknowledge that the procedures and references used to develop the results contained in the attached report are consistent with professional standard practices used in Transportation, Traffic, and Civil Engineering as applied through professional engineering judgment and relevant experience.

Name: **Alejandro Anaya, PE, PTOE**
Registered Principal Officer for ESRP CORPORATION

Florida PE No: **66983**

Signature

7/30/2014
Date

TRACK & CARD ROOM TRAFFIC IMPACT STUDY

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1. INTRODUCTION

ESRP Corporation has been retained to perform a traffic concurrency study in connection with the proposed **Track & Card Room** development (Project) to be located in Marion County, Florida. The project will include a horse racetrack and card room that will be developed in three phases. This report documents the aforementioned analysis which meets the criteria for a Marion County traffic concurrency approval and was prepared based on the methodology discussed with Marion County staff (via phone and email) after submitting detailed estimates of trip generation, trip distribution and general project information.

The project will be located approximately 1,500 feet west of US 301 and just north of the Sumter County line in south Marion County, Florida. The proposed land uses and phases are as follows:

- Phase 1: Horse racetrack
- Phase 2: Initial Card Room to be developed in two sub-phases
 - Phase 2A: 10,000-SF modular building (Card Room), parking, entrance driveway, etc.
 - Phase 2B: Second 10,000-SF modular building (Card Room)
- Phase 3: Future 26,000-SF permanent Card Room building (that replaces the two modular buildings) and additional parking.

For Phase 1, access to the project site is proposed via an existing unpaved road that connects to a private driveway located approximately 400 feet south of the Marion/Sumter county line. Phase 2 includes a paved entrance driveway (Site Access Driveway) that will connect to US 301 at the County Line Road intersection (this will require demolition of the building located on the west side of this intersection). Figure 1

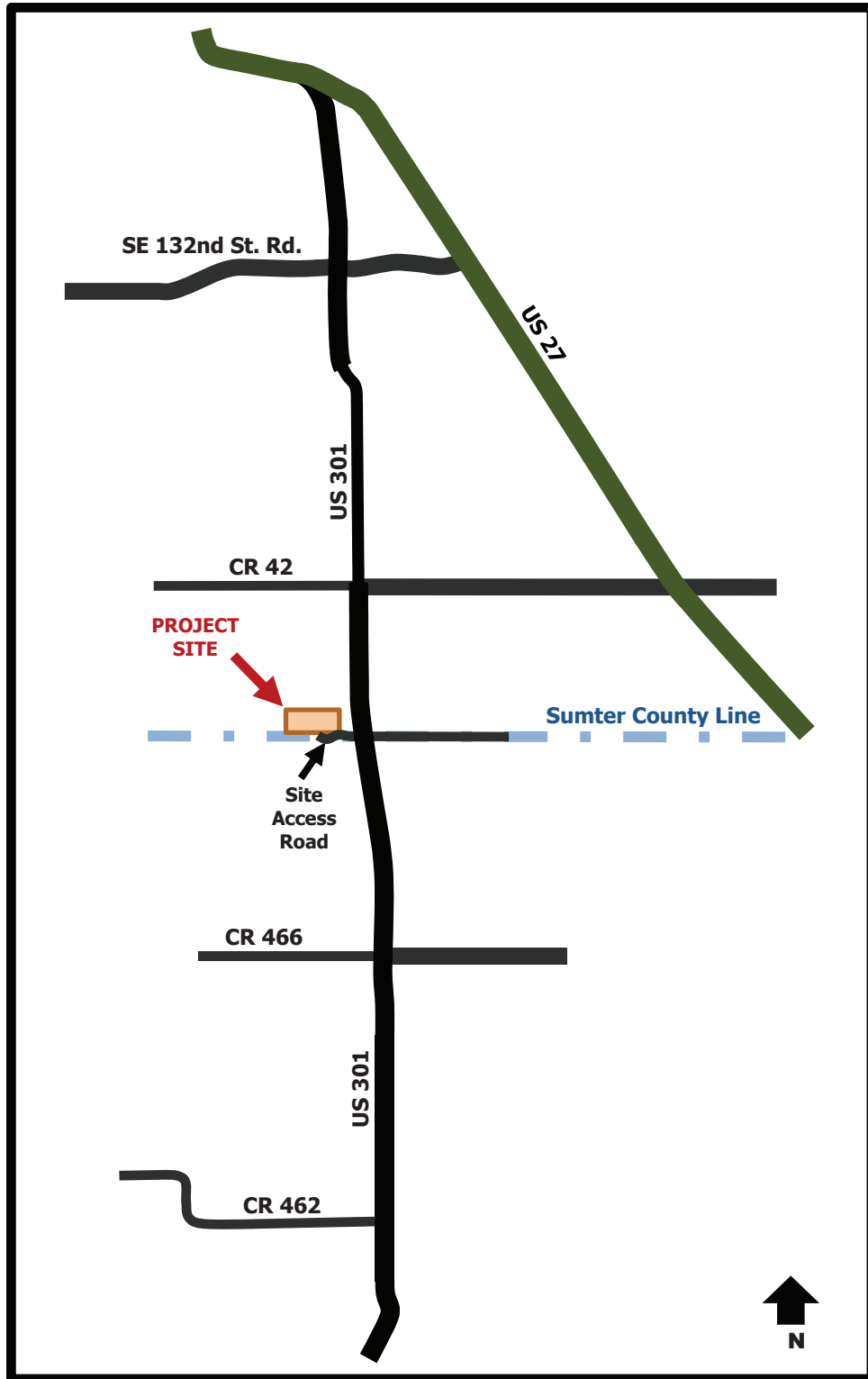
shows the location of the project site as well as the surrounding roadway network. An illustration with the preliminary site plan and proposed phases is included in Appendix 1.

The analysis detailed here was undertaken in response to Marion County Transportation Concurrency requirements. Since the number of trips generated by Phase 1 is expected to be very low (2 inbound trips and 24 outbound trips during the PM peak hour) this study does not include analysis of traffic conditions for Phase 1 alone. The trips generated by the horse racetrack (Phase 1) are included in the Phase 2 and Phase 3 analyses presented here. This report summarizes the procedures and methodologies as well as the findings and recommendations in connection with the analysis.

2. METHODOLOGY

Prior to initiating the analysis, the methodology was discussed with Marion County staff. Specific project information including detailed estimates of trip generation, trip distribution and other project information were submitted to the County on June 12, 2014. This information as well as the required methodology for a traffic impact analysis were discussed via phone and email. Additionally, Marion County provided specific information including level-of-service standards, signal timing, etc. The study that follows is fully consistent with the agreed-upon methodology.

Figure 1 - Project Site Location and Adjacent Roadways



3. TRIP GENERATION

The characteristics of the proposed land uses are different from the characteristics of the land uses found in ITE Trip Generation. As a result, trips generated by the project were estimated based on information provided by the client. This information was developed taking into account similar facilities as well as proposed hours of operation, and expected numbers of employees, contractors, clients, etc. The similar facilities that were taken into account include:

- Ocala Breeders Sales Company, located at 1701 SW 60th Avenue, Ocala, FL 34474
- Ocala Pocker, located half way between Ocala and Gainesville, 3 miles east of I-75
- Daytona Beach Kennel Club & Poker Room, located at 960 S Williamson Blvd., Daytona Beach, FL 32114

The gross trips and trip-generation rates obtained from the trip generation calculations are recorded in Tables 1A and 1B. The trip-generation raw data provided by the client are included in Appendix 1.

Table 1A - Phase 2 Trip Generation

Land Use Code	Description	Units	Trip Generation Rates						Trips Generated				
			Average Weekday Traffic	Morning Peak Hour		Evening Peak Hour		Average Weekday Traffic	Morning Peak Hour		Evening Peak Hour		
				In	Out	In	Out		In	Out	In	Out	
Phase 2A													
452	Horse Racetrack	50.0 Attendees	2.72	0.00	0.00	0.04	0.48	136	0	0	2	24	
N/A	Card Room - Phase 2A	10.0 KSF	27.60	0.00	0.00	5.10	3.90	276	0	0	51	39	
Total Phase 2A:								412	0	0	53	63	
Phase 2B													
452	Horse Racetrack	50.0 Attendees	2.72	0.00	0.00	0.04	0.48	136	0	0	2	24	
N/A	Card Room - Phase 2B	20.0 KSF	27.50	0.00	0.00	5.15	3.95	550	0	0	103	79	
Total Phase 2B:								686	0	0	105	103	

Estimates based on data provided by Mr. Tony Mendola.

Horse Racetrack Operation Hours: 10am - 4pm, races between 11am and 3pm (9 staff members).

Card Room Operation Hours: 10am - 12am (Phase 2A: 35 staff members / Phase 2B: 70 staff members) - Weekdays.

Table 1B - Phase 3 Trip Generation

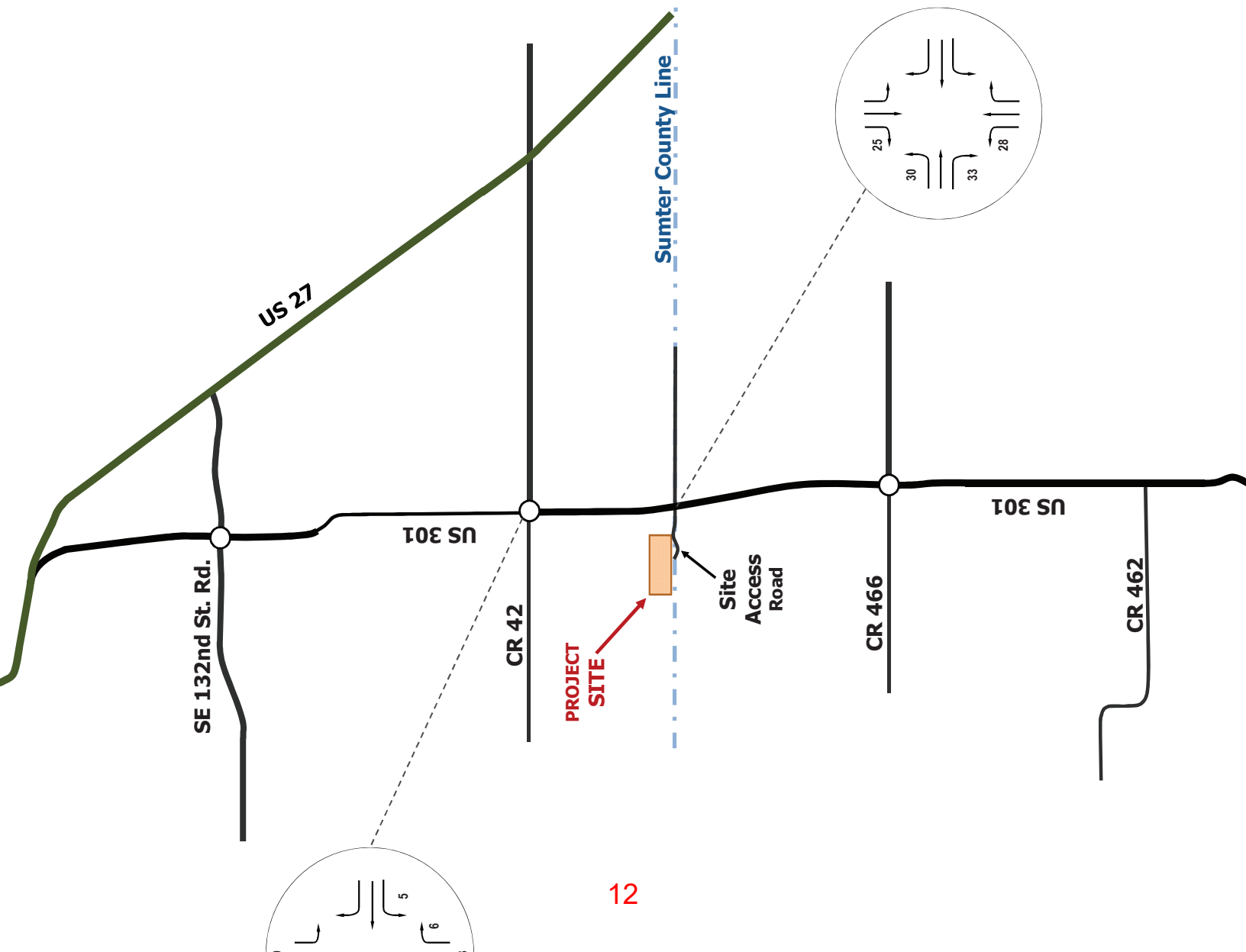
Land Use Code	Description	Units	Trip Generation Rates						Trips Generated			
			Average Weekday Traffic	Morning Peak Hour		Evening Peak Hour		Average Weekday Traffic	Morning Peak Hour		Evening Peak Hour	
				In	Out	In	Out		In	Out	In	Out
452	Horse Racetrack	50.0 Attendees	2.72	0.00	0.00	0.04	0.48	136	0	0	2	24
N/A	Card Room - Phase III	26.0 KSF	34.46	0.00	0.00	6.62	5.19	896	0	0	172	135
Total:								1032	0	0	174	159

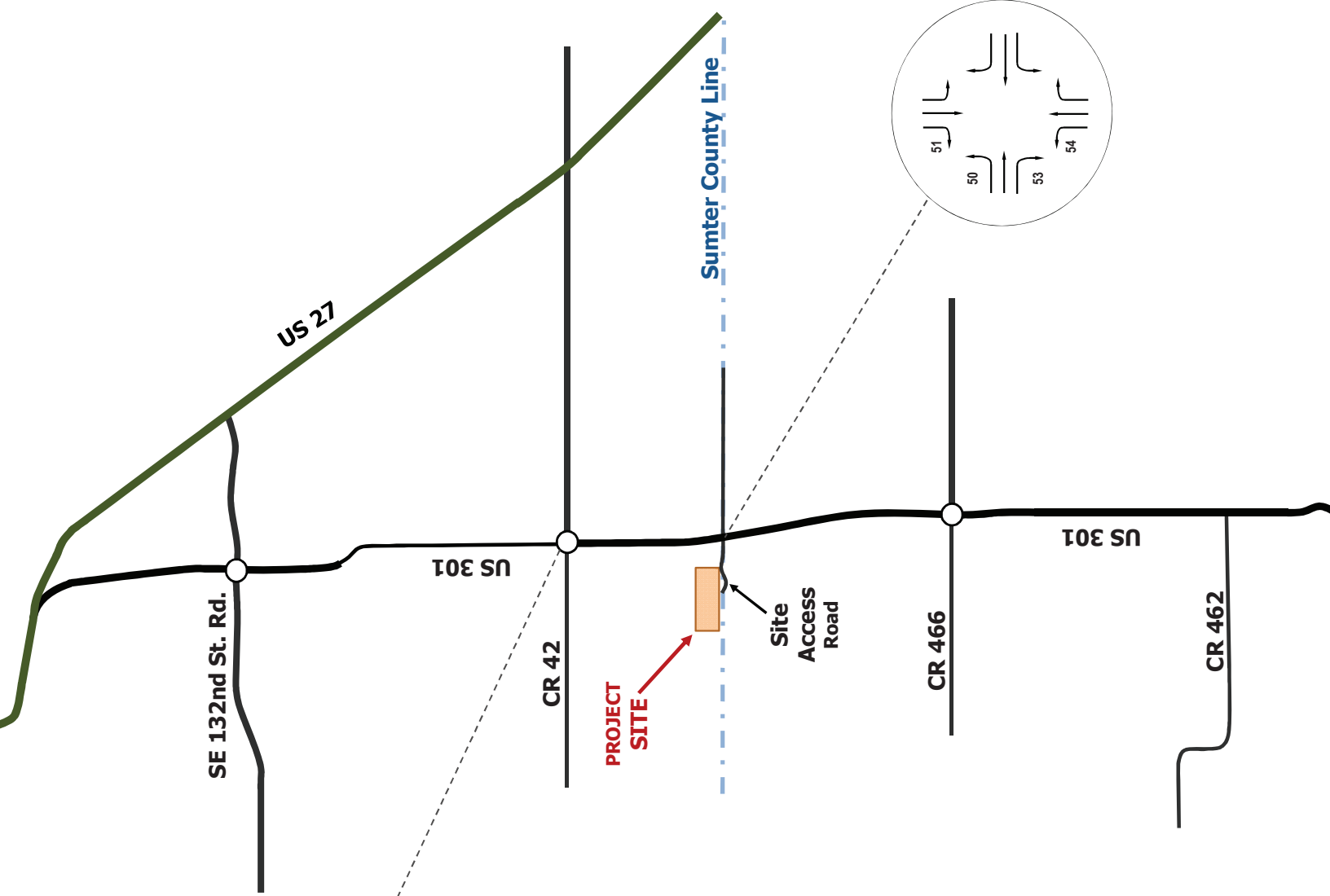
Estimates based on data provided by Mr. Tony Mendola.
 Horse Racetrack Operation Hours: 10am - 4pm, races between 11am and 3pm (9 staff members).
 Card Room Operation Hours: 10am - 12am (140 staff members) - Weekdays.

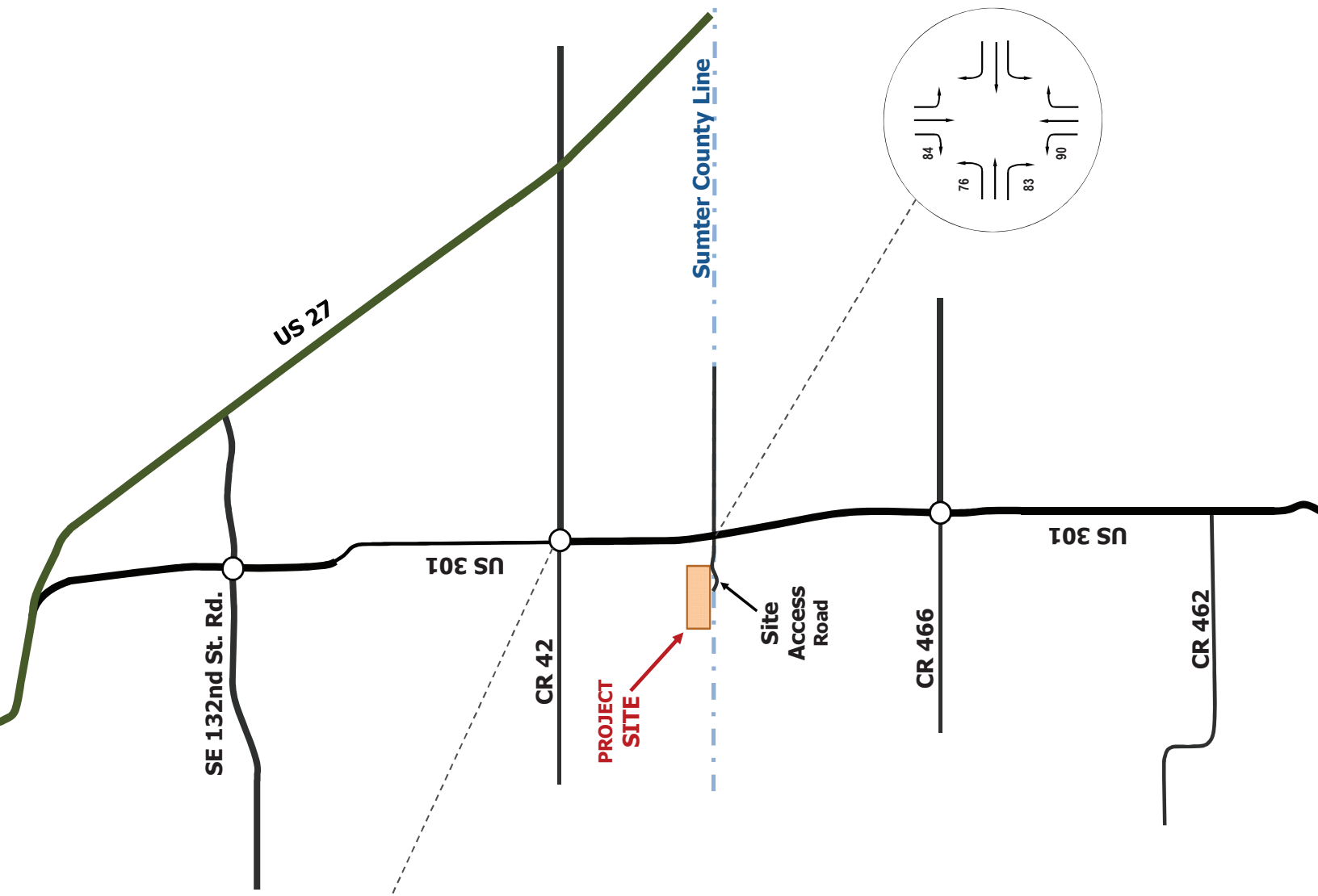
As shown in Table 1A, after Phase 2A is completed, the project is expected to generate approximately 53 inbound and 63 outbound new trips during the afternoon peak hour. Similarly, after Phase 2B is completed, the project is expected to generate approximately 105 inbound and 103 outbound trips during the afternoon peak hour. Table 1B shows that approximately 174 inbound and 159 outbound new trips are expected to be generated by the project, during the afternoon peak hour, after completion of Phase 3.

4. PROJECT TRAFFIC DISTRIBUTION AND ASSIGNMENT

Project traffic assignments to the roadway network were estimated based on a selected-zone analysis using the Central Florida Regional Planning Model (CFRPM). A model output network that shows the expected distribution of project traffic is provided in Appendix 2. Figures 2A, 2B and 2C illustrate the expected project trips under the Phase-2A, Phase-2B and Phase-3 scenarios.







5. STUDY AREA

Based on the Marion County Traffic Impact Analysis Guidelines, the study area should include roadway segments where estimated project trips are equal to or greater than 3% of the peak-hour roadway-segment standard service volume plus one segment beyond. Additionally, main intersections (normally signalized) through which 100 or more project trips pass, during the PM-peak hour, must be included in the study area.

The study area for the Phase-2 scenarios includes the section of US 301 between County Line Road and 132nd St Rd. as well as the US 301/County Line Road intersection. The expected number of trips passing through the US 301/CR 42 intersection under the Phase-2B scenario is very close to the established threshold. As a result, this intersection was also included in the Phase 2 analyses.

The study area for the Phase-3 scenario includes the section of US 301 from south of CR 462 to US 441 as well as the US 301/CR 42 and US 301/County Line Road intersections. The US 301/CR 466 intersection also meets the Marion County study-area criteria. However, this intersection is located in Sumter County. A Sumter County staff member (Mr. Chris Schumacher) preliminary indicated that Sumter County may not be concerned with potential impacts at this intersection because it is located within FDOT right-of-way. We know that Marion County contacted Sumter County regarding this topic but no response has been received yet.

Study network determination tables for Phase-2 and Phase-3 scenarios are included in Appendix 3.

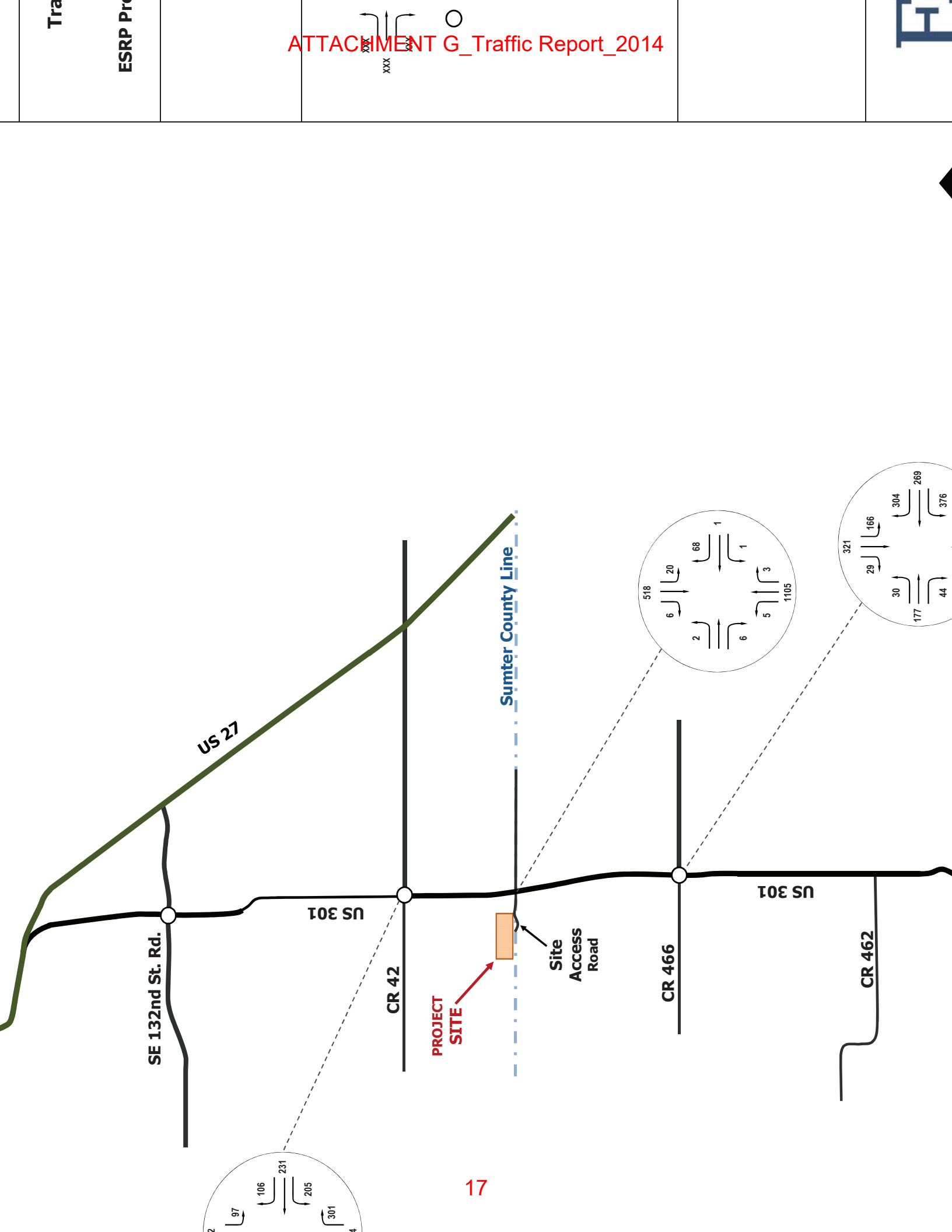
6. FUNDED IMPROVEMENTS

A review of the Ocala/Marion County TPO Transportation Improvement Program (TIP) and the Florida Department of Transportation (FDOT) STIP showed one intersection improvement project (turn-lane addition) at the US 301/CR 466 intersection that is funded for construction in 2014. No additional funded projects were found within the study area. However, a widening project (addition of 2 lanes) on US 301 between CR 42 and 143rd Place is shown in the Ocala/Marion County TPO Priority Projects list. It seems that funding for this project is not available at this moment.

7. EXISTING TRAFFIC CONDITIONS

The existing PM peak-hour conditions at the study-area intersections were estimated based on turning movement counts. The raw counts were adjusted to the peak season using the latest FDOT peak-season factor. Copies of the turning movement counts are included in Appendix 4.

The existing traffic volumes are shown in Figure 3. Segment volumes may not be equivalent from one intersection to the adjacent intersection included in the figure due to the existence of driveways in between the analyzed intersections and sometimes due to minor fluctuations in traffic volumes between typical days. As a result, the average of segment volumes between analyzed intersections was utilized for roadway segment analysis purposes. A table that details the existing volumes used for all the roadway segments included in the study area is also provided in Appendix 4.



An intersection capacity analysis was conducted for the two intersections included in the study area under existing conditions during the PM-peak hour. This capacity analysis was based on the Highway Capacity Manual (HCM) and the Synchro software.

Based on the intersection capacity analysis mentioned above, both intersections included in the study area are currently operating at acceptable levels of service. Table 2 summarizes the results of the intersection capacity analysis under existing conditions. The corresponding Synchro worksheets are provided in Appendix 5.

Table 2 - Intersection Capacity Analysis – Existing Conditions

Location	Operation Type	Substandard v/c ratios	Existing PM Peak-Hour Level of Service	Recommended Improvements
US 301 @ CR 42	Signalized	All v/c ratios < 1.0	C	N/A
US 301 @ County Line Rd. / Site Access	TWSC	All v/c ratios < 1.0	B / B A / B (EB-LTR / WB-LTR NB-L / SB-L)	N/A

EB=Eastbound; WB=Westbound; NB=Northbound; SB=Southbound; L=Left-Turn; R=Right-Turn
TR=Shared Through and Right; LR=Shared Left and Right; LTR=Shared Left, Through and Right

Afternoon peak-hour roadway segment capacity analyses, under existing conditions, were conducted for all roadway segments included in the study area. The existing two-way volumes were compared with the service volumes and level-of-service thresholds found in the most recent version of the FDOT Quality / LOS Handbook. Table 3 reports the existing segment volumes as well as the corresponding service volumes and levels of service.

Table 3 – Existing Roadway Segment Volumes and Levels of Service

Roadway	From	To	Existing PM Peak-Hour Volumes		Peak-Hour Service Volumes		Two-Way Existing Volumes	Two-Way Peak-Hour Service Volume	v/c Ratio (Based on standard capacity)	Existing LOS (PM Peak-Hour)	
			NB/EB	SB/WB	NB/EB	SB/WB				NB/EB	SB/WB
US 301	US 441	132nd St. Rd.	613	468	2000	1580	1082	3580	0.30	C	C
	132nd St. Rd.	143 Pl.	862	439	2000	1580	1301	3580	0.36	C	C
	143 Pl.	SE 147 St.	862	439	1250	1029	1301	2279	0.57	C	B
	SE 147 St.	CR 42	862	439	1190	980	1301	2170	0.60	D	C
	CR 42	County Line Rd.	1147	553	2000	1580	1700	3580	0.47	C	C
	County Line Rd.	CR 466	1074	521	2000	1580	1595	3580	0.45	C	C
	CR 466	CR 462	1194	741	2000	1580	1935	3580	0.54	C	C
	CR 462	South	742	576	2000	1580	1318	3580	0.37	C	C

As shown in Table 3, all roadway segments within the study area are currently operating at level of service D or better.

8. FUTURE TRAFFIC VOLUMES

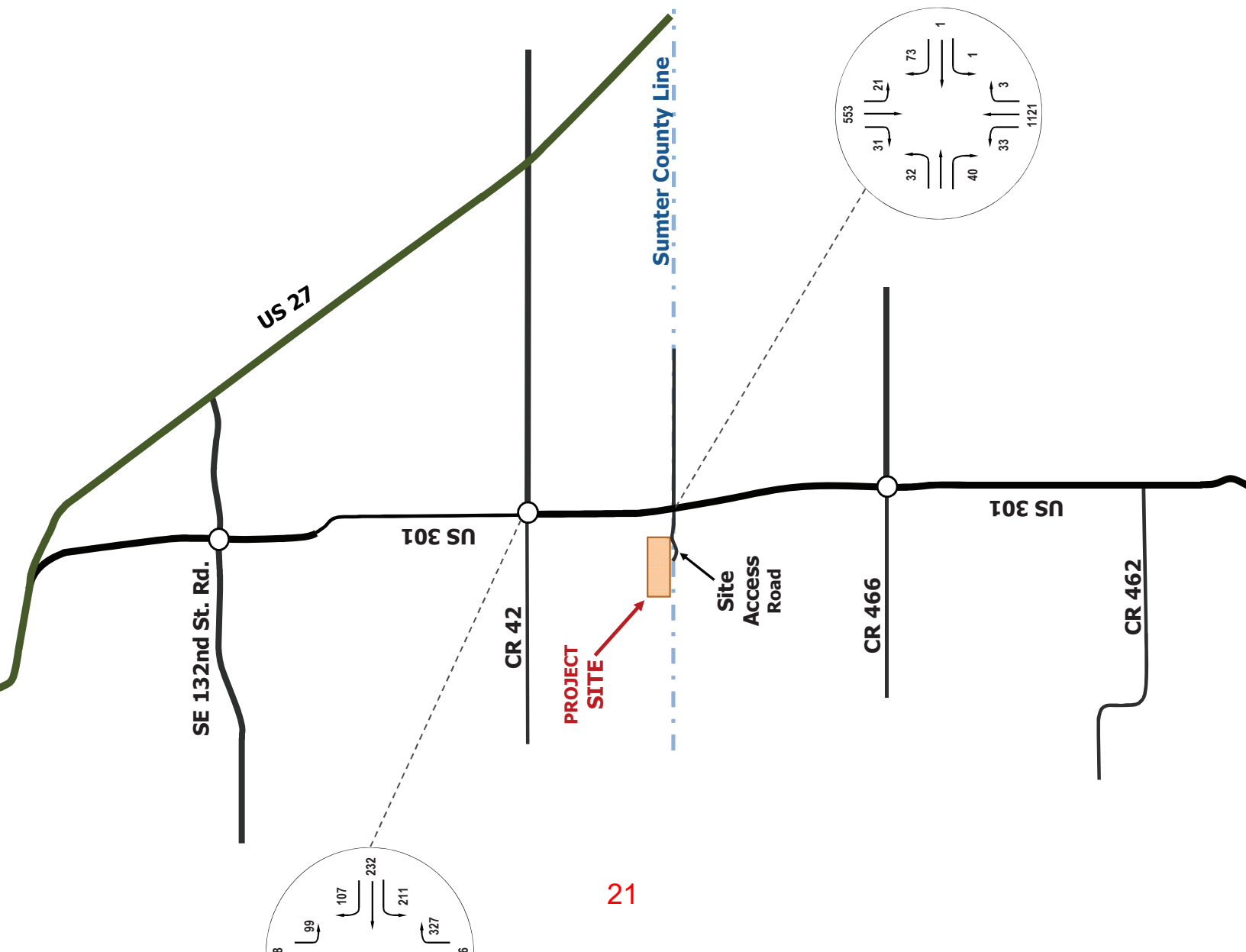
Future background traffic volumes were estimated using growth rates calculated by averaging the annual percentage growth of AADT volumes between 2008 and 2012. Most of the data used for these calculations were found in the most recent version of the Ocala/Marion County TPO Traffic Counts & Trends Manual (TC&TM). However, FDOT Historical AADT reports were used for locations not included in the TC&TM. Some of the growth rates obtained from the AADT volumes were negative. As a result, a minimum growth rate of 0.5% was assumed.

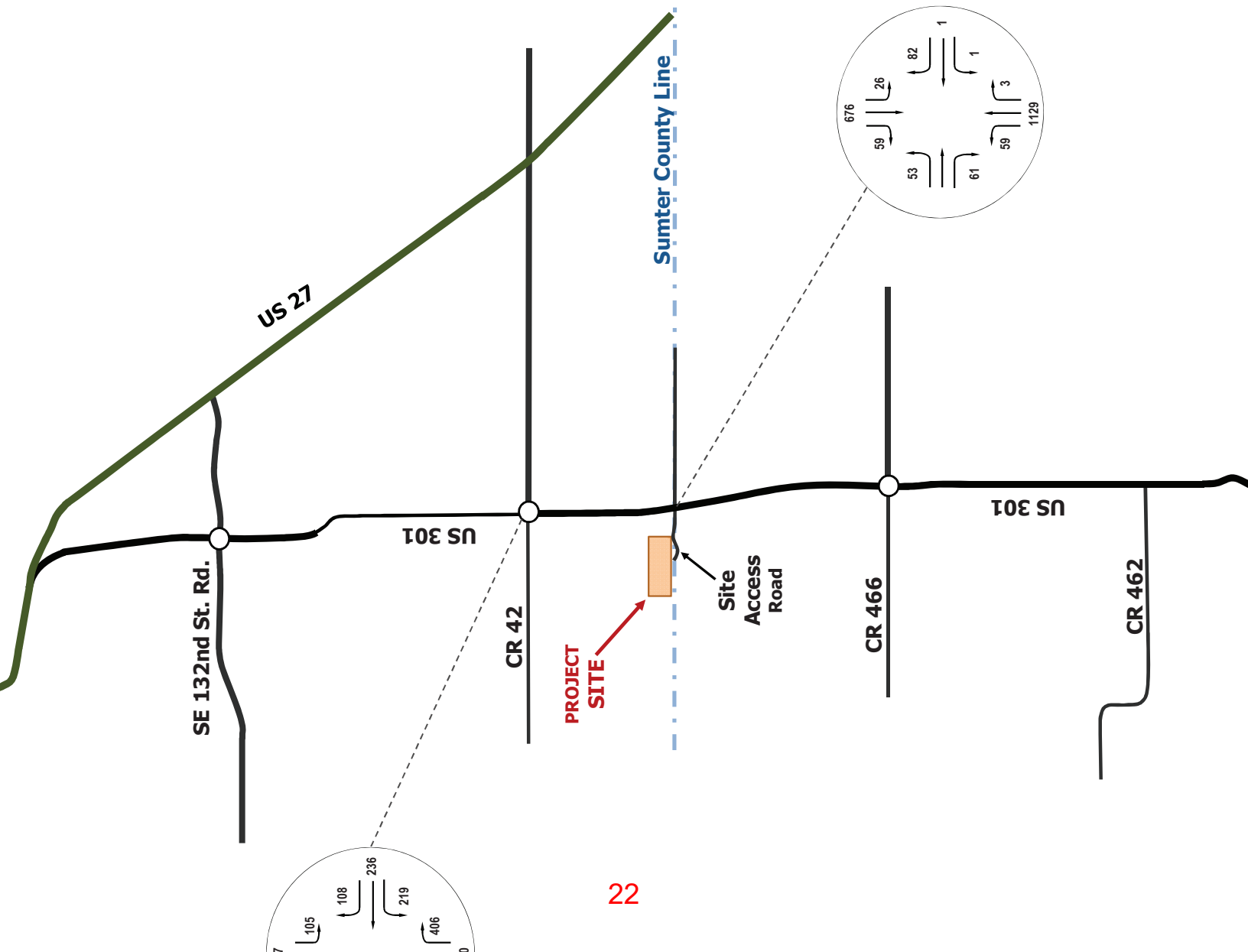
The growth rates described above were compounded annually through the build-out year of all phases (Phase 2A: 2015; Phase 2B: 2018; Phase 3: 2020) and applied to the existing

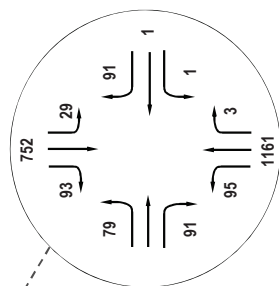
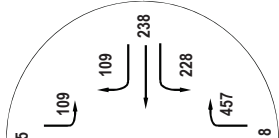
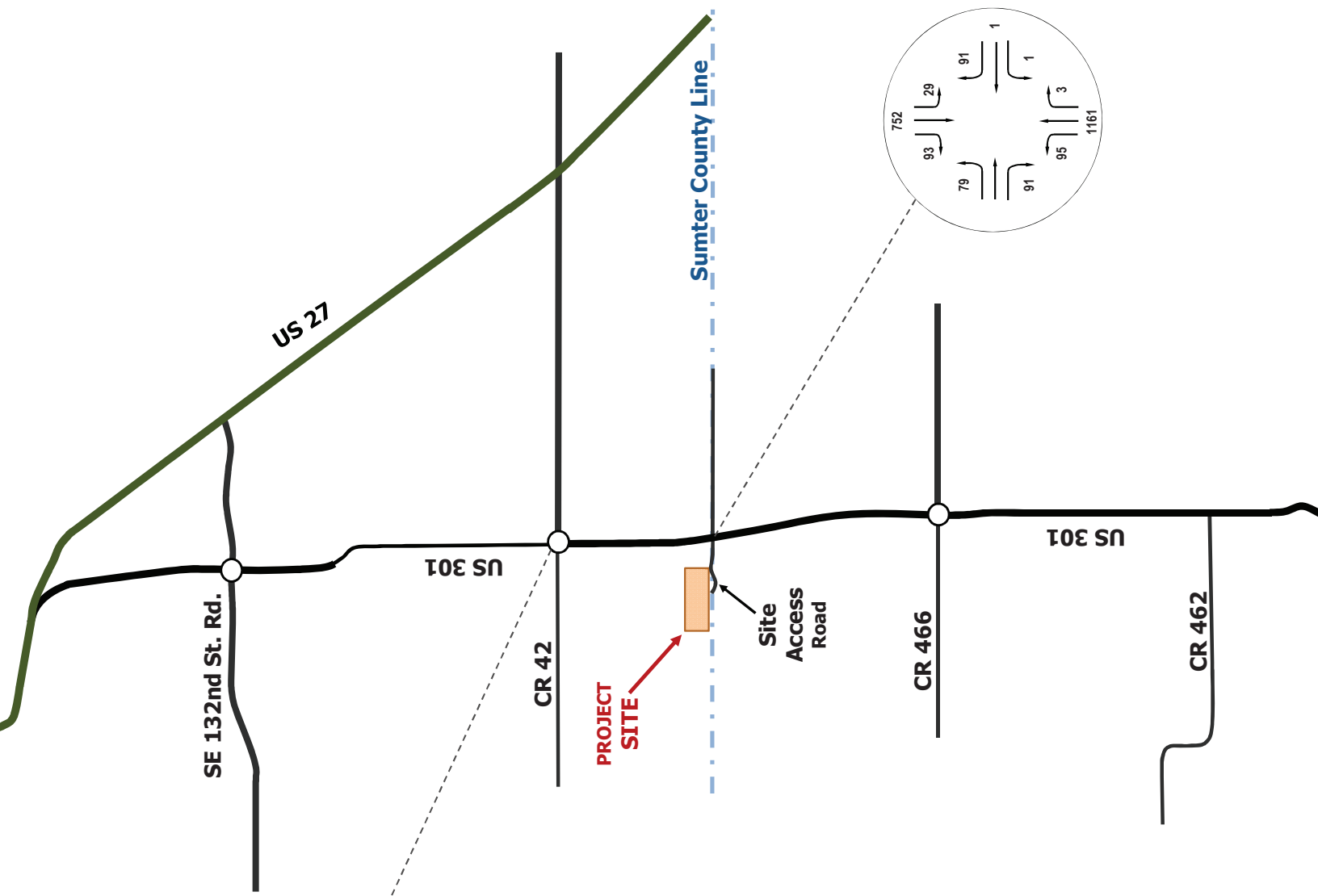
traffic volumes to obtain background volumes for each phase. A table that details the background traffic calculations is provided in Appendix 6.

Estimated future total traffic volumes were calculated by adding the site-generated traffic (project volumes) to the future background volumes mentioned above. Tables that show the future total-traffic segment volumes for each scenario (Phase 2A, Phase 2B and Phase 3) are included under Appendix 6.

Tables with detailed turning movements that include existing, background and future-total volumes at the study-area intersections are also included in Appendix 6. Figures 4A, 4B and 4C show the estimated future total-traffic volumes for Phase 2A, Phase 2B and Phase 3.







9. FUTURE TOTAL TRAFFIC CONDITIONS

Capacity analyses under Phase-2A, Phase-2B and Phase-3 future total-traffic conditions were conducted for the intersections included in the study area. These capacity analyses were based on the Highway Capacity Manual (HCM) and the Synchro software.

Table 4 summarizes the results of the future total-traffic intersection capacity analyses and the corresponding Synchro reports are provided under Appendix 7.

Table 4 - Intersection Capacity Analysis - Future Conditions

Intersection	Phase 2A (2015)			Phase 2B (2018)			Phase 3 (2020)		
	Future Peak-Hour Level of Service	v/c ratios	Rec Improv.	Future Peak-Hour Level of Service	v/c ratios	Rec Improv.	Future Peak-Hour Level of Service	v/c ratios	Recommended Improvements
US 301 @ CR 42	C	All v/c ratios < 1.0	N/A	C	All v/c ratios < 1.0	N/A	C	All v/c ratios < 1.0	N/A
US 301 @ County Line Rd. / Site Access	C / C A / B (EB-LTR / WB-LTR NB-L / SB-L)	All v/c ratios < 1.0	N/A	C / C A / B (EB-LTR / WB-LTR NB-L / SB-L)	All v/c ratios < 1.0	N/A	F / C B / B (EB-LTR / WB-LTR NB-L / SB-L)	All v/c ratios < 1.0 EB Queue = 125 feet	Provide an EB-L lane. This will reduce the EB queue by 55 feet
US 301 @ County Line Rd. / Site Access (Improved)	---	---	---	---	---	---	D / C B / B (EB App / WB-LTR NB-L / SB-L)	All v/c ratios < 1.0 EB Queue = 70 feet (EB-L)	N/A

EB=Eastbound; WB=Westbound; NB=Northbound; SB=Southbound; L=Left-Turn; R=Right-Turn
TR=Shared Through and Right; LR=Shared Left and Right; LTR=Shared Left, Through and Right

As shown in Table 4, all intersections included in the study area are expected to operate within level of service standards under Phase-2A and Phase-2B future total-traffic conditions. Under Phase-3 future total-traffic conditions, the eastbound approach at the

US 301/County Line Road intersection is expected to operate at level-of-service F with a 95th percentile queue of 125 feet. Adding an eastbound left-turn lane would improve the approach level of service to "D" and would reduce the expected 95th percentile queue by 55 feet. Even though the expected LOS for the new eastbound left-turn lane will be "F", the anticipated maximum delay for this movement will be only 56.6 seconds. This delay will occur during the PM-peak period. Since the actual traffic patterns and volumes after Phase 3 build-out may be a little different from the estimates included in this report, a signal-warrant analysis could be conducted after completion of Phase 3 to determine if a traffic signal would be needed to maintain adequate traffic and safety conditions at this location.

Afternoon peak-hour roadway-segment capacity analyses, under future total-traffic conditions, were conducted for all roadway segments included in the study area. The future total-traffic volumes were compared with the service volumes and level-of-service thresholds found in the FDOT Quality / LOS Handbook. Tables 5A, 5B and 5C report the future segment volumes as well as the corresponding service volumes and levels of service under Phase-2A, Phase-2B and Phase-3 pm-peak conditions.

Table 5A – Phase 2A Future Roadway Segment Volumes and LOS

Roadway	From	To	Total PM Peak-Hour Volumes		Total PM Peak-Hour Two-Way Volumes	Standard Service Volume		Peak-Hour Two-Way Service Volume	v/c Ratio (Based on standard capacity)	Total Traffic LOS (PM Peak-Hour)	
			2015 NB/EB	2015 SB/WB		NB/EB	SB/WB			NB/EB	SB/WB
US 301	132nd St. Rd.	143 Pl.	902	467	1,369	2,000	1,580	3,580	0.38	C	C
	143 Pl.	SE 147 St.	902	467	1,369	1,250	1,029	2,279	0.60	D	C
	SE 147 St.	CR 42	903	467	1,370	1,190	980	2,170	0.63	D	C
	CR 42	County Line Rd.	1,255	616	1,870	2,000	1,580	3,580	0.52	C	C

Table 5B – Phase 2B Future Roadway Segment Volumes and LOS

Roadway	From	To	Total PM Peak-Hour Volumes		Total PM Peak-Hour Two-Way Volumes	Standard Service Volume		Peak-Hour Two-Way Service Volume	v/c Ratio (Based on standard capacity)	Total Traffic LOS (PM Peak-Hour)	
			2018 NB/EB	2018 SB/WB		NB/EB	SB/WB			NB/EB	SB/WB
US 301	132nd St. Rd.	143 Pl.	972	513	1,485	2,000	1,580	3,580	0.41	C	C
	143 Pl.	SE 147 St.	972	513	1,485	1,250	1,029	2,279	0.65	D	C
	SE 147 St.	CR 42	972	514	1,486	1,190	980	2,170	0.68	D	C
	CR 42	County Line Rd.	1,522	760	2,282	2,000	1,580	3,580	0.64	C	C

Table 5C – Phase 3 Future Roadway Segment Volumes and LOS

Roadway	From	To	Total PM Peak-Hour Volumes		Total PM Peak-Hour Two-Way Volumes	Standard Service Volume		Peak-Hour Two-Way Service Volume	v/c Ratio (Based on standard capacity)	Total Traffic LOS (PM Peak-Hour)	
			2020 NB/EB	2020 SB/WB		NB/EB	SB/WB			NB/EB	SB/WB
US 301	US 441	132nd St. Rd.	650	503	1,153	2,000	1,580	3,580	0.32	C	C
	132nd St. Rd.	143 Pl.	1,028	556	1,584	2,000	1,580	3,580	0.44	C	C
	143 Pl.	SE 147 St.	1,028	557	1,585	1,250	1,029	2,279	0.70	D	C
	SE 147 St.	CR 42	1,029	558	1,587	1,190	980	2,170	0.73	D	C
	CR 42	County Line Rd.	1,714	873	2,586	2,000	1,580	3,580	0.72	C	C
	County Line Rd.	CR 466	1,256	647	1,903	2,000	1,580	3,580	0.53	C	C
	CR 466	CR 462	1,489	941	2,429	2,000	1,580	3,580	0.68	C	C
	CR 462	South	793	619	1,412	2,000	1,580	3,580	0.39	C	C

As shown in Tables 5A, 5B and 5C, the section of US 301 included in the study area is expected to operate within level of service standards under Phase-2A, Phase-2B and Phase-3 future total-traffic conditions.

10. CONCLUSION

The analysis described in this report is in connection with a proposed development that includes a horse racetrack and a card room to be constructed in three phases. The project site is approximately 1,500 feet west of US 301 and just north of the Sumter County line in south Marion County, Florida.

The analysis conducted by ESRP evaluated the potential impact that the proposed development would have on the roadways and intersections included in the project study area under future conditions.

Capacity analyses were conducted for all intersections and roadway segments located within the study area. The analyses performed follow the procedures required by Marion County and the agreed-upon methodology. Based on the analyses conducted for this project, the following conclusions are reached:

- All roadway segments included in the study area are currently operating within level-of-service standards during the afternoon-peak hour.
- All intersections included in the study area currently operate at acceptable levels of service, with v/c ratios < 1.0 for each lane group, during the afternoon peak-hour.
- All roadway segments included in the study area are expected to operate within level-of-service standards, under future-traffic conditions, with or without the additional traffic that will be generated after completion of Phase 2A, Phase 2B or Phase 3 of the proposed Track & Card Room development.
- The US 301/CR 42 intersection is expected to operate within acceptable levels of service and maintain v/c ratios <1.0 (for each lane group) after completion of Phase 2A, Phase 2B and Phase 3 of the proposed Track & Card Room development.

- The US 301/County Line Road intersection is expected to operate within acceptable levels of service and maintain v/c ratios <1.0 (for each lane group) after completion of Phases 2A and 2B of the proposed Track & Card Room development. With the additional traffic generated by Phase 3, the eastbound approach at this intersection is expected to operate at level-of-service F with a 95th-percentile queue of 125 feet. Adding an eastbound left-turn lane would improve the approach level of service to "D" and would reduce the expected 95th percentile queue by 55 feet. Even though the expected LOS for the new eastbound left-turn lane will be "F", the anticipated maximum delay for this movement will be just 56.6 seconds (which will occur during the PM-peak period). As a result, only this improvement is recommended. Since the actual traffic patterns and volumes after Phase 3 build-out may be a little different from the estimates included in this report, a signal-warrant analysis could be conducted after completion of Phase 3 to determine if a traffic signal would be needed to maintain adequate traffic and safety conditions.
- The required storage length for the recommended eastbound left-turn lane mentioned above will be approximately 70 feet. Based on the Synchro capacity analyses, the maximum queue lengths expected (under Phase-2A, Phase-2B or Phase-3 total-traffic conditions) at all the other study-area intersection approaches will not exceed the capacity of the existing auxiliary lanes.
- After completion of Phase 2A, the expected number of southbound right-turning vehicles at the US 301/County Line Road intersection, during the pm-peak hour, will be below the lower threshold (for exclusive right-turn lanes) recommended in the FDOT Driveway Information Guide. Additionally, the expected pm-peak southbound through volume at this location will be relatively low (v/c ratio = 0.23). As a result, a southbound right-turn lane is not recommended for Phase 2A.
- After completion of Phase 2B, the expected number of southbound pm-peak right-turning vehicles at the US 301/County Line Road intersection will be slightly above

the upper threshold (for exclusive right-turn lanes) recommended in the FDOT Driveway Information Guide. However, the pm-peak southbound through volume at this location will still be relatively low (v/c ratio = 0.28). Since a southbound right-turn lane will likely increase safety at this location, based on the expected Phase-2B total-traffic volumes, we recommend periodic monitoring of this intersection (after Phase 2B is built) to determine if the actual traffic volumes would justify an exclusive southbound right-turn lane. Coordination with FDOT will be needed to determine if this improvement is required.

APPENDIX 1

PRELIMINARY SITE PLAN & PHASES

TRIP GENERATION DATA PROVIDED BY CLIENT

ATTACHMENT G_Traffic Report_2014

Track and Card Room Trip Generation Information from Client

	Typical "Busy" Weekday			Typical "Busy" Weekend Day			NOTES		
	Horse Racetrack*	Card Room Phase 2A	Card Room Phase 2B	Card Room Phase 3	Horse Racetrack	Card Room Phase 2A		Card Room Phase 2B	Card Room Phase 3
Number of Staff Members/Employees	9	35	35	140	No weekend horse races	40	40	160	Horse Racetrack: 18 Employees & Contractors combined
Number of Staff Shifts	1	2	2	2	No weekend horse races	3	3	3	
Staff Schedule	10:00AM to 4:00PM	10-5/5-12			No weekend horse races	24 HRS			
Card Room - Hours of Operation		10AM - 12 AM				24 HRS			
Expected # of Contractors and/or Vendors	9	3	2	8	No weekend horse races	Ø	Ø	Ø	Horse Racetrack: 18 Employees & Contractors combined
Expected # of Trucks	1	1	1	3	No weekend horse races	Ø	Ø	Ø	Horse Racetrack: 4 Trucks per Month (assumed 1 for a "busy" weekday)
Expected # of Clients		100	100	300		150	150	500	
Schedule of Horse Races	12:00PM to 3:00PM				No weekend horse races				
Expected # of Attendees per Horse Race	50				No weekend horse races				
Expected # of Trucks per Horse Race	2				No weekend horse races				
Expected # of Additional Vehicles during Special Events					No weekend horse races				
Schedule of Special Events					No weekend horse races				

* Horse Racetrack: Information Provided by Mr. Tony Mendola - (Based on races held at Ocala Breeders Sales Company in October of 2012)

Any other relevant information?:

APPENDIX 2
DISTRIBUTION OF NEW TRIPS

APPENDIX 3
STUDY AREA DETERMINATION TABLES

**Study Area Determination
Track & Card Room
Phase 2B**

Project No: C00026.P001

Roadway	From	To	Segment Characteristics			Two-Way Service Volume	Directional Service Volume		Project Traffic Assignment	PM Peak-Hour Project Volumes		Two-Way Peak-Hour Project Volumes	3% of Two-Way Standard Capacity	Exceeds 3% of Two-Way Standard Capacity?			
			Typical Section	Area	Class		Posted Speed Limit	Peak Direction		Off-Peak Direction	Standard LOS				2018 NB/EB	2018 SB/WB	
US 301	US 441 132nd St. Rd. 143 Pl. SE 147 St. SE 147 St. CR 42 CR 42 County Line Rd. CR 466 CR 462 CR 462 South	132nd St. Rd. 143 Pl. SE 147 St. CR 42 County Line Rd. CR 466 CR 462 South	4D	Urban	I	55	3,580	2000	1580	12%	12	24	107	N			
			4D	Urban	I	55	3,580	2000	1580	35%	36	73	107	N			
			2D	Urban	I	55	2,279	1250	1029	35%	36	74	68	Y			
			2U	Urban	I	55	2,170	1190	980	36%	37	38	75	65	Y		
			4D	Urban	I	55	3,580	2000	1580	48%	49	50	99	107	N		
			4D	Urban	I	45	3,580	2000	1580	50%	53	52	105	107	N		
			4D	Urban	I	45	3,580	2000	1580	33%	34	34	68	107	N		
			4D	Urban	I	45	3,580	2000	1580	16%	17	17	34	107	N		
			132nd St. Rd.	CR 484	US 301	4D	Urban	I	45	3,222	1800	1422	21%	22	44	97	N
			CR 42	US 301	SE 58 Ave.	4D	Urban	I	45	3,222	1800	1422	2%	2	5	97	N
	US 301	SE 77 Ave.	2U	Urban	I	55	1,120	616	504	2%	2	4	34	N			
	US 301		4D	Urban	II	45	2,736	1530	1206	10%	10	20	82	N			

**Study Area Determination
Track & Card Room
Phase 3**

Project No: C00026.P001

Roadway	From	To	Segment Characteristics			Two-Way Service Volume	Directional Service Volume		Project Traffic Assignment	PM Peak-Hour Project Volumes		Two-Way Peak-Hour Project Volumes	3% of Two-Way Standard Capacity	Exceeds 3% of Two-Way Standard Capacity?	
			Typical Section	Area	Class		Posted Speed Limit	Peak Direction		Off-Peak Direction	2020 NB/EB				2020 SB/WB
US 301	US 441 132nd St. Rd. 143 Pl. SE 147 St. SE 147 St. CR 42 CR 42 County Line Rd. CR 466 CR 466 CR 462 CR 462 South	132nd St. Rd. 143 Pl. SE 147 St. CR 42 County Line Rd. CR 466 CR 462 CR 462 South	4D	Urban	I	55	2000	1580	12%	18	20	39	107	N	
			4D	Urban	I	55	2000	1580	35%	56	61	117	107	Y	
			2D	Urban	I	55	1250	1029	35%	56	62	118	68	68	Y
			2U	Urban	I	55	1190	980	36%	57	62	120	65	65	Y
			4D	Urban	I	55	2000	1580	48%	76	83	159	107	107	Y
			4D	Urban	I	45	2000	1580	50%	88	80	168	107	107	Y
			4D	Urban	I	45	2000	1580	33%	57	52	109	107	107	Y
			4D	Urban	I	45	2000	1580	16%	29	26	55	107	107	N
			4D	Urban	I	45	1800	1422	21%	37	34	71	97	97	N
			4D	Urban	I	45	1800	1422	2%	4	4	8	97	97	N
CR 42	SE 58 Ave. US 301	US 301 SE 77 Ave.	2U	Urban	I	55	616	504	2%	3	3	6	34	N	
			4D	Urban	II	45	1530	1206	10%	16	17	33	82	N	

APPENDIX 4

**EXISTING TURNING MOVEMENT COUNTS
(Seasonally Adjusted)**

EXISTING SEGMENT VOLUMES

ESRP CORPORATION

Traffic Data Collection Summary

Intersection: US 301 / SE Highway 42
Jurisdiction: Marion County

Date of Data Collection: 6/19/2014
 Data Collected by: Micovision
 Hours of Data Collection: 4:00 PM to 6:00 PM
 Count Groups Included: All Groups / All Vehicles

EB/WB Road: SE Highway 42
 NB/SB Road: US 301
 Main Direction: EB/WB NB/SB
 Peak-Season CF: 1.04

Movement/Lane Group	EASTBOUND SE Highway 42				WESTBOUND SE Highway 42				NORTHBOUND US 301				SOUTHBOUND US 301				Intersection
	LT 1.04	TH 1.04	RT 1.04	All Lane Groups	LT 1.04	TH 1.04	RT 1.04	All Lane Groups	LT 1.04	TH 1.04	RT 1.04	All Lane Groups	LT 1.04	TH 1.04	RT 1.04	All Lane Groups	
Start Time																	
4:00 PM	6	32	3	41	59	61	29	149	18	168	75	261	26	80	8	114	
4:15 PM	7	34	9	50	44	45	22	111	17	168	72	257	27	80	7	114	
4:30 PM	8	36	9	53	60	56	24	140	17	179	68	264	28	83	4	115	
4:45 PM	5	33	6	44	59	57	25	141	24	179	61	264	30	85	3	118	
Total	26	135	27	188	222	219	100	541	76	694	276	1046	111	328	22	461	
Hourly Volumes																	
Hour Starting at:																	
4:00 PM	26	135	27	188	222	219	100	541	76	694	276	1046	111	328	22	461	
4:15 PM	30	132	32	194	213	214	101	528	85	702	291	1078	108	330	19	457	
4:30 PM	32	122	35	0	189	205	106	0	93	724	301	0	1118	97	322	0	439
4:45 PM	31	118	40	189	192	225	104	521	101	718	318	1137	90	319	22	431	
5:00 PM	32	127	44	203	168	216	112	496	92	683	311	1086	83	307	22	412	
Peak-Hour Volumes																	
4:30 PM	8	36	9	53	60	56	24	140	17	179	68	264	28	83	4	115	
4:45 PM	5	33	6	44	59	57	25	141	24	179	61	264	30	85	3	118	
5:00 PM	10	29	8	47	50	56	30	136	27	176	90	293	23	82	5	110	
5:15 PM	9	24	12	45	36	62	27	125	25	190	82	297	16	72	8	96	
5:30 PM	7	32	14	53	47	50	22	119	25	173	85	283	21	80	6	107	
5:45 PM	6	42	10	58	35	48	33	116	15	144	54	213	23	73	3	99	
Total	32	127	44	203	168	216	112	496	92	683	311	1086	83	307	22	412	
PHF:																	
	0.80	0.85	0.73	0.89	0.85	0.93	0.88	0.96	0.86	0.95	0.84	0.94	0.81	0.95	0.63	0.93	

ESRP CORPORATION
Traffic Data Collection Summary
Intersection: US 301 / SE Highway 42
Jurisdiction: Marion County

Date of Data Collection: 6/19/2014
 Data Collected by: Miovison
 Hours of Data Collection: 4:00 PM to 6:00 PM
 Count Groups Included: [Heavy Vehicles](#)

Movement/Lane Group PSCF	EASTBOUND SE Highway 42				WESTBOUND SE Highway 42				NORTHBOUND US 301				SOUTHBOUND US 301				Intersection
	LT 1.04	TH 1.04	RT 1.04	All Lane Groups	LT 1.04	TH 1.04	RT 1.04	All Lane Groups	LT 1.04	TH 1.04	RT 1.04	All Lane Groups	LT 1.04	TH 1.04	RT 1.04	All Lane Groups	
Start Time																	
4:00 PM	1	2	0	3	3	0	0	3	0	6	2	8	0	6	0	6	
4:15 PM	0	0	0	0	1	1	1	3	0	10	1	11	1	5	1	7	
4:30 PM	0	0	0	0	2	0	0	2	0	5	3	8	0	7	0	7	
4:45 PM	0	0	0	0	2	0	0	2	0	11	1	12	0	1	0	1	
Total	1	2	0	3	8	1	1	10	0	32	7	39	1	19	1	21	
5:00 PM	0	0	0	0	0	0	0	0	0	8	2	10	0	5	0	5	
5:15 PM	0	0	0	0	0	3	0	3	1	3	0	4	0	1	0	1	
5:30 PM	0	0	1	1	2	0	0	2	0	4	0	4	0	1	0	1	
5:45 PM	0	0	0	0	3	0	1	4	0	4	1	5	0	4	0	4	
Total	0	0	1	1	5	3	1	9	1	19	3	23	0	11	0	11	
Hourly Volumes																	
Hour Starting at:																	
4:00 PM	1	2	0	3	8	1	1	10	0	32	7	39	1	19	1	21	
4:15 PM	0	0	0	0	5	1	1	7	0	34	7	41	1	18	1	20	
4:30 PM	0	0	0	0	4	3	0	7	1	27	6	34	0	14	0	14	
4:45 PM	0	0	1	1	4	3	0	7	1	26	3	30	0	8	0	8	
5:00 PM	0	0	1	1	5	3	1	9	1	19	3	23	0	11	0	11	
Peak-Hour Volumes																	
4:00 PM	1	2	0	3	3	0	0	3	0	6	2	8	0	6	0	6	
4:15 PM	0	0	0	0	1	1	1	3	0	10	1	11	1	5	1	7	
4:30 PM	0	0	0	0	2	0	0	2	0	5	3	8	0	7	0	7	
4:45 PM	0	0	0	0	2	0	0	2	0	11	1	12	0	1	0	1	
Peak-Hour Volume:	1	2	0	3	8	1	1	10	0	32	7	39	1	19	1	21	
Heavy Vehicles %:	3.1%	1.6%	0.0%	1.6%	3.9%	0.4%	0.9%	1.8%	0.0%	4.4%	2.3%	3.5%	1.0%	5.9%	5.0%	4.8%	

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ESRP CORPORATION Traffic Data Collection Summary

Intersection: US 301 / County Line Rd.
Jurisdiction: Marion County

Date of Data Collection: 6/19/2014
 Data Collected by: Mivision
 Hours of Data Collection: 4:00 PM to 6:00 PM
 Count Groups Included: All Groups / All Vehicles

EB/WB Road: County Line Rd.
 NB/SB Road: US 301
 Main Direction: EB/WB NB/SB
 Peak-Season CF: 1.04

Movement/Lane Group	EASTBOUND County Line Rd.			WESTBOUND County Line Rd.			NORTHBOUND US 301			SOUTHBOUND US 301			Intersection				
	LT 1.04	TH 1.04	RT 1.04	All Lane Groups	LT 1.04	TH 1.04	RT 1.04	All Lane Groups	LT 1.04	TH 1.04	RT 1.04	All Lane Groups					
Start Time																	
4:00 PM	6	1	1	8	1	3	9	13	2	244	1	247	5	128	4	137	466
4:15 PM	3	1	2	6	0	0	23	23	1	229	0	230	4	128	2	134	362
4:30 PM	3	0	1	4	1	0	8	9	1	242	0	243	3	137	2	398	398
4:45 PM	0	0	3	3	0	0	14	14	2	240	1	243	8	130	2	140	400
Total	12	2	7	21	2	3	54	59	6	955	2	963	20	523	10	553	1566
5:00 PM	1	0	3	4	0	0	18	18	0	289	1	290	9	131	2	142	454
5:15 PM	0	0	0	0	1	0	21	22	1	301	1	303	1	126	1	128	433
5:30 PM	1	0	0	1	0	1	15	16	2	275	0	277	2	131	1	134	428
5:45 PM	1	0	1	2	0	0	7	7	1	188	2	191	9	112	0	121	336
Total	3	0	4	7	1	1	61	63	4	1053	4	1061	21	500	4	525	1656
Hourly Volumes																	
Hour Starting at:																	
4:00 PM	12	2	7	21	2	3	54	59	6	955	2	963	20	523	10	553	1596
4:15 PM	7	1	9	17	1	0	63	64	4	1000	2	1006	24	526	8	558	1655
4:30 PM	4	0	7	11	2	0	61	63	4	1072	3	1079	21	524	7	552	1769
4:45 PM	2	0	6	8	1	1	68	70	5	1105	3	1113	20	518	6	544	1735
5:00 PM	3	0	4	7	1	1	61	63	4	1063	4	1061	21	500	4	525	1656
Peak-Hour Volumes																	
4:45 PM	0	0	3	3	0	0	14	14	2	240	1	243	8	130	2	140	400
5:00 PM	1	0	3	4	0	0	18	18	0	289	1	290	9	131	2	142	454
5:15 PM	0	0	0	0	1	0	21	22	1	301	1	303	1	126	1	128	453
5:30 PM	1	0	0	1	0	1	15	16	2	275	0	277	2	131	1	134	428
Peak-Hour Volume:	2	0	6	8	1	1	68	70	5	1105	3	1113	20	518	6	544	1735
PHF:	0.50		0.50	0.50	0.25	0.25	0.81	0.80	0.63	0.92	0.75	0.92	0.56	0.99	0.75	0.96	0.96

ESRP CORPORATION Traffic Data Collection Summary

Intersection: US 301 / CR 466
Jurisdiction: Sumter County

Date of Data Collection: 6/19/2014
 Data Collected by: Miovision
 Hours of Data Collection: 4:00 PM to 6:00 PM
 Count Groups Included: All Groups / All Vehicles NB/ SB

EB/WB Road: CR 466
 NB/SB Road: US 301
 Main Direction: EB/WB
 Peak-Season CF: 1.04

Movement/Lane Group	EASTBOUND CR 466				WESTBOUND CR 466				NORTHBOUND US 301				SOUTHBOUND US 301				Intersection
	LT 1.04	TH 1.04	RT 1.04	All Lane Groups	LT 1.04	TH 1.04	RT 1.04	All Lane Groups	LT 1.04	TH 1.04	RT 1.04	All Lane Groups	LT 1.04	TH 1.04	RT 1.04	All Lane Groups	
Start Time																	
4:00 PM	1	27	12	40	97	63	66	226	18	170	82	270	48	80	5	133	666
4:15 PM	9	41	14	64	75	61	72	208	22	139	94	255	53	78	4	135	662
4:30 PM	6	42	17	65	95	62	60	217	23	147	84	254	50	73	4	127	663
4:45 PM	10	40	15	65	76	67	71	214	19	159	80	258	51	79	5	135	672
Total	26	150	58	234	343	253	269	865	82	615	340	1037	202	310	18	530	2666
5:00 PM	2	33	8	43	101	70	78	249	21	188	104	313	32	87	10	129	734
5:15 PM	10	46	10	66	102	68	76	246	27	191	110	328	45	92	8	145	763
5:30 PM	8	58	11	77	97	64	79	240	32	163	100	295	38	63	6	107	749
5:45 PM	0	48	8	56	81	53	72	206	15	105	68	188	43	64	6	113	563
Total	20	185	37	242	381	255	305	941	95	647	382	1124	158	306	30	494	2804
Hourly Volumes																	
Hour Starting at:																	
4:00 PM	26	150	58	234	343	253	269	865	82	615	340	1037	202	310	18	530	2666
4:15 PM	27	156	54	237	347	260	281	888	85	633	362	1080	186	317	23	526	2733
4:30 PM	28	161	50	239	374	267	285	926	90	685	378	1153	178	331	27	536	2867
4:45 PM	30	177	44	251	376	269	304	949	99	701	394	1194	166	321	29	516	2910
5:00 PM	20	185	37	242	381	255	305	941	95	647	382	1124	158	306	30	494	2801
Peak-Hour Volumes																	
4:45 PM	10	40	15	65	76	67	71	214	19	159	80	258	51	79	5	135	672
5:00 PM	2	33	8	43	101	70	78	249	21	188	104	313	32	87	10	129	734
5:15 PM	10	46	10	66	102	68	76	246	27	191	110	328	45	92	8	145	765
5:30 PM	8	58	11	77	97	64	79	240	32	163	100	295	38	63	6	107	719
Peak-Hour Volume:	30	177	44	251	376	269	304	949	99	701	394	1194	166	321	29	516	2910
PHF:	0.75	0.76	0.73	0.81	0.92	0.96	0.96	0.95	0.77	0.92	0.90	0.91	0.81	0.87	0.73	0.89	0.93

ESRP CORPORATION Traffic Data Collection Summary

Intersection: US 301 / CR 466
Jurisdiction: Sumter County

Date of Data Collection: 6/19/2014
Data Collected by: Miovison
Hours of Data Collection: 4:00 PM to 6:00 PM
Count Groups Included: [Heavy Vehicles](#)

Movement/Lane Group PSCF	EASTBOUND CR 466				WESTBOUND CR 466				NORTHBOUND US 301				SOUTHBOUND US 301				Intersection
	LT 1.04	TH 1.04	RT 1.04	All Lane Groups	LT 1.04	TH 1.04	RT 1.04	All Lane Groups	LT 1.04	TH 1.04	RT 1.04	All Lane Groups	LT 1.04	TH 1.04	RT 1.04	All Lane Groups	
Start Time																	
4:00 PM	0	0	1	1	4	4	1	9	1	5	3	9	1	9	1	11	
4:15 PM	0	0	1	1	2	1	0	3	0	8	0	8	1	8	0	9	
4:30 PM	0	0	5	5	4	0	1	5	4	8	0	12	1	4	0	5	
4:45 PM	0	0	2	2	2	1	0	3	2	11	1	14	0	6	1	7	
Total	0	0	9	9	12	6	2	20	7	32	4	43	3	27	2	32	
5:00 PM	0	0	0	0	2	1	1	4	0	10	1	11	1	3	0	4	
5:15 PM	0	0	0	0	1	0	1	2	0	3	1	4	0	1	0	1	
5:30 PM	0	0	1	1	1	0	0	1	0	3	1	4	0	2	0	2	
5:45 PM	0	0	1	1	0	0	2	2	1	5	1	7	0	3	0	3	
Total	0	0	2	2	4	1	4	9	1	21	4	26	1	9	0	10	
Hourly Volumes																	
Hour Starting at:																	
4:00 PM	0	0	9	9	12	6	2	20	7	32	4	43	3	27	2	32	
4:15 PM	0	0	8	8	10	3	2	15	6	37	2	45	3	21	1	25	
4:30 PM	0	0	7	7	9	2	3	14	6	32	3	41	2	14	1	17	
4:45 PM	0	0	3	3	6	2	2	10	2	27	4	33	1	12	1	14	
5:00 PM	0	0	2	2	4	1	4	9	1	21	4	26	1	9	0	10	
Peak-Hour Volumes																	
4:00 PM	0	0	1	1	4	4	1	9	1	5	3	9	1	9	1	11	
4:15 PM	0	0	1	1	2	1	0	3	0	8	0	8	1	8	0	9	
4:30 PM	0	0	5	5	4	0	1	5	4	8	0	12	1	4	0	5	
4:45 PM	0	0	2	2	2	1	0	3	2	11	1	14	0	6	1	7	
Peak-Hour Volume:	0	0	9	9	12	6	2	20	7	32	4	43	3	27	2	32	
Heavy Vehicles %:	0.0%	0.0%	20.5%	3.6%	3.2%	2.2%	0.7%	2.1%	7.1%	4.6%	1.0%	3.6%	1.8%	8.4%	6.9%	6.2%	

ATTACHMENT G_Traffic Report 2014



**Existing Traffic Volumes
Track & Card Room
Project No: C00026.P001**

Roadway	From	To	Ocala/Marion TPO & FDOT Traffic Data				2014 Peak-Hour Volumes (Existing)					
			2012 AADT	Growth Rate	K	D	Source	NB/EB	SB/WB	D Factor	Two-Way	
US 301	US 441	132nd St. Rd.	11900	0.50%	9.0	0.57	FDOT FTO	613	468	0.57	1,082	
	132nd St. Rd.	143 Pl.		2.09%	9.00		2014 TMCS	862	439	0.66	1,301	
	143 Pl.	SE 147 St.		2.09%	9.00		2014 TMCS	862	439	0.66	1,301	
	SE 147 St.	CR 42		2.09%	9.00		2014 TMCS	862	439	0.66	1,301	
	CR 42	County Line Rd.		6.75%	9.00		2014 TMCS	1,147	553	0.67	1,700	
	County Line Rd.	CR 466		1.45%	9.00		2014 TMCS	1,074	521	0.67	1,595	
	CR 466	CR 462		3.23%	9.00		2014 TMCS	1,194	741	0.62	1,935	
	CR 462	South		0.50%	9.00	0.56	FDOT FTO	742	576	0.56	1,318	
	132nd St. Rd.	CR 484	US 301	8600	11.63%	9.00	0.56	O/M TPO	540	424	0.56	965
		US 301	US 441	7100	0.50%	9.00	0.56	O/M TPO	361	284	0.56	645
CR 42	SE 58 Ave.	US 301		0.50%	9.50		2014 TMCS	189	344	0.35	533	
	US 301	SE 77 Ave.		0.50%	9.50		2014 TMCS	520	542	0.49	1,062	

APPENDIX 5











SYNCHRO REPORTS
(Existing Conditions)

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Queues

Existing Traffic

6: US 301 & CR 42




















										
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	33	160	209	236	108	95	739	307	99	349
v/c Ratio	0.15	0.36	0.75	0.53	0.23	0.15	0.43	0.33	0.23	0.21
Control Delay	31.2	31.0	52.9	37.4	7.0	10.0	19.3	3.4	10.5	16.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.2	31.0	52.9	37.4	7.0	10.0	19.3	3.4	10.5	16.2
Queue Length 50th (ft)	17	79	127	134	0	22	160	0	23	65
Queue Length 95th (ft)	42	136	210	207	40	57	271	53	58	117
Internal Link Dist (ft)		11698		10792			8005			550
Turn Bay Length (ft)	330		280			575		575	535	
Base Capacity (vph)	394	794	506	812	751	636	1730	943	496	1696
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.20	0.41	0.29	0.14	0.15	0.43	0.33	0.20	0.21
Intersection Summary										

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HCM Unsignalized Intersection Capacity Analysis

Existing Traffic

10: US 301 & Site Access Rd./County Line Rd.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	2	0	6	1	1	68	5	1105	3	20	518	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	2	0	6	1	1	71	5	1151	3	21	540	6
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								Raised			Raised	
Median storage (veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1242	1749	273	1481	1751	577	546			1154		
vC1, stage 1 conf vol	584	584		1163	1163							
vC2, stage 2 conf vol	657	1165		318	588							
vCu, unblocked vol	1242	1749	273	1481	1751	577	546			1154		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.2		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	99	99	100	85	99			96		
cM capacity (veh/h)	278	222	725	196	236	460	1019			584		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3				
Volume Total	8	73	5	767	387	21	360	186				
Volume Left	2	1	5	0	0	21	0	0				
Volume Right	6	71	0	0	3	0	0	6				
cSH	517	445	1019	1700	1700	584	1700	1700				
Volume to Capacity	0.02	0.16	0.01	0.45	0.23	0.04	0.21	0.11				
Queue Length 95th (ft)	1	15	0	0	0	3	0	0				
Control Delay (s)	12.1	14.7	8.5	0.0	0.0	11.4	0.0	0.0				
Lane LOS	B	B	A			B						
Approach Delay (s)	12.1	14.7	0.0			0.4						
Approach LOS	B	B										
Intersection Summary												
Average Delay			0.8									
Intersection Capacity Utilization			41.7%		ICU Level of Service					A		
Analysis Period (min)			15									

APPENDIX 6

FUTURE SEGMENT VOLUMES

INTERSECTION VOLUMES (Detailed TMC's)

**Background Traffic
Track & Card Room
Project No: C00026.P001**

Roadway	From	To	Existing Counts (PM Peak-Hour)			MOCF	Count Station Volumes (AADT)						Growth Rates			PM Peak-Hour Background Traffic Volumes (DDHV)									
			NB/EB	SB/WB	PM-Pk NB/EB D Fact.		2,008	2,009	2,010	2,011	2,012	2008 to 2012			2,014		2,015		2,018		2,020				
												Annual Growth Rate (Estim)	Annual Growth Rate (Calc)	Annual Growth Rate (Used)	Growth Factor	2014 NB/EB	2014 SB/WB	2014 to 2015 Growth Factor	2015 NB/EB	2015 SB/WB	2015 to 2018 Growth Factor	2018 NB/EB	2018 SB/WB	2015 to 2020 Growth Factor	2020 NB/EB
US 301	US 441	132nd St. Rd.	613	468	0.57	9.0	12,700	12,500	11,700	11,800	11,900	-1.57%	0.50%	1.00	613	468	1.005	616	471	1.015	626	478	1.025	632	483
	132nd St. Rd.	143 Pl.	862	439	0.66	9.0	11,600	11,900	12,000	12,200	12,600	2.09%	2.09%	1.00	862	439	1.021	880	448	1.063	935	476	1.105	972	495
	143 Pl.	SE 147 St.	862	439	0.66	9.0	11,600	11,900	12,000	12,200	12,600	2.09%	2.09%	1.00	862	439	1.021	880	448	1.063	935	476	1.105	972	495
	SE 147 St.	CR 42	862	439	0.66	9.0	11,600	11,900	12,000	12,200	12,600	2.09%	2.09%	1.00	862	439	1.021	880	448	1.063	935	476	1.105	972	495
	CR 42	County Line Rd.	1,147	553	0.67	9.0	13,400	14,100	13,900	15,900	17,300	6.75%	6.75%	1.00	1,147	553	1.067	1,224	590	1.202	1,472	710	1.337	1,638	790
	County Line Rd.	CR 466	1,074	521	0.67	9.0	13,500	13,700	13,900	14,100	14,300	1.45%	1.45%	1.00	1,074	521	1.014	1,090	529	1.043	1,137	552	1.072	1,169	567
	CR 466	CR 462	1,194	741	0.62	9.0	15,100	15,000	16,100	17,200	17,100	3.23%	3.23%	1.00	1,194	741	1.032	1,233	765	1.097	1,352	839	1.162	1,432	888
	CR 462	South	742	576	0.56	9.0	15,100	14,500	15,100	13,500	14,500	-0.76%	0.50%	1.00	742	576	1.005	746	579	1.015	757	588	1.025	764	593
132nd St. Rd.	CR 484	US 301	540	424	0.56	9.0	NC		7,100	6,600	8,600	11.63%	11.63%	1.00	540	424	1.116	603	474	1.349	813	639	1.582	954	749
	US 301	US 441	361	284	0.56	9.0	NC		7,500	6,300	7,100	-1.65%	0.50%	1.00	361	284	1.005	363	285	1.015	369	290	1.025	372	293
CR 42	SE 58 Ave.	US 301	189	344	0.35	9.5	5,400	5,500	4,800	3,900	3,900	-7.41%	0.50%	1.00	189	344	1.005	190	346	1.015	193	351	1.025	195	354
	US 301	SE 77 Ave.	520	542	0.49	9.5	10,900	10,400	10,500	10,600	10,800	-0.20%	0.50%	1.00	520	542	1.005	523	545	1.015	530	553	1.025	536	558



**2015 Total Traffic Volumes
Track & Card Room
Phase 2A**

Project No: C00026.P001

Roadway	From	To	PM Peak-Hour Directional Volumes							
			Background Traffic 2015		Project Traffic		Total Traffic			
			NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB		
US 301	US 441	132nd St. Rd.	616	471	7	6	624	477		
	132nd St. Rd.	143 Pl.	880	448	22	19	902	467		
	143 Pl.	SE 147 St.	880	448	22	19	902	467		
	SE 147 St.	CR 42	880	448	23	19	903	467		
	CR 42	County Line Rd.	1,224	590	30	25	1,255	616		
	County Line Rd.	CR 466	1,090	529	27	32	1,116	560		
	CR 466	CR 462	1,233	765	17	21	1,250	786		
	CR 462	South	746	579	9	10	754	589		
	132nd St. Rd.	CR 484	US 301	603	474	11	13	614	487	
		US 301	US 441	363	285	1	1	365	287	
CR 42	SE 58 Ave.	US 301	190	346	1	1	191	347		
	US 301	SE 77 Ave.	523	545	6	5	529	550		



**2018 Total Traffic Volumes
Track & Card Room
Phase 2B**

Project No: C00026.P001

Roadway	From	To	PM Peak-Hour Directional Volumes							
			Background Traffic 2018		Project Traffic		Total Traffic			
			NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB		
US 301	US 441	132nd St. Rd.	626	478	12	12	638	490		
	132nd St. Rd.	143 Pl.	935	476	36	37	972	513		
	143 Pl.	SE 147 St.	935	476	36	37	972	513		
	SE 147 St.	CR 42	935	476	37	38	972	514		
	CR 42	County Line Rd.	1,472	710	49	50	1,522	760		
	County Line Rd.	CR 466	1,137	552	53	52	1,190	604		
	CR 466	CR 462	1,352	839	34	34	1,386	873		
	CR 462	South	757	588	17	17	774	604		
	132nd St. Rd.	CR 484	US 301	813	639	22	22	836	661	
		US 301	US 441	369	290	2	2	371	292	
CR 42	SE 58 Ave.	US 301	193	351	2	2	195	353		
	US 301	SE 77 Ave.	530	553	10	10	541	563		



**2020 Total Traffic Volumes
Track & Card Room
Phase 3**

Project No: C00026.P001

Roadway	From	To	PM Peak-Hour Directional Volumes							
			Background Traffic 2020		Project Traffic		Total Traffic			
			NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB		
US 301	US 441	132nd St. Rd.	632	483	18	20	650	503		
	132nd St. Rd.	143 Pl.	972	495	56	61	1,028	556		
	143 Pl.	SE 147 St.	972	495	56	62	1,028	557		
	SE 147 St.	CR 42	972	495	57	62	1,029	558		
	CR 42	County Line Rd.	1,638	790	76	83	1,714	873		
	County Line Rd.	CR 466	1,169	567	88	80	1,256	647		
	CR 466	CR 462	1,432	888	57	52	1,489	941		
	CR 462	South	764	593	29	26	793	619		
	132nd St. Rd.	CR 484	US 301	954	749	37	34	990		783
		US 301	US 441	372	293	4	4	376		297
CR 42	SE 58 Ave.	US 301	195	354	3	3	198	357		
	US 301	SE 77 Ave.	536	558	16	17	551	575		

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ESRP CORPORATION
Traffic Volumes at Intersections



Project Name: **Track & Card Room - Phase 2A**
Jurisdiction: **Marion County**

US 301 / CR 42

Afternoon Peak-Hour Volumes	EASTBOUND CR 42				WESTBOUND CR 42				NORTHBOUND US 301				SOUTHBOUND US 301			
	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups
Existing (2014)	32	122	35	189	205	231	106	542	93	724	301	1118	97	322	20	439
- Peak Hour Factor	0.80	0.85	0.73	0.89	0.85	0.93	0.88	0.96	0.86	0.95	0.84	0.94	0.81	0.95	0.63	0.93
- Movement/Lane Group %	16.9%	64.6%	18.5%	100%	37.8%	42.6%	19.6%	100%	8.3%	64.8%	26.9%	100%	22.1%	73.3%	4.6%	100%
- Heavy Vehicles %	3.1%	1.6%	0.0%	2%	3.9%	0.4%	0.9%	2%	0.0%	4.4%	2.3%	3%	1.0%	5.9%	5.0%	5%
Future Background	190				545				1193				448			
- Movement/Lane Group	32	123	35	190	206	232	107	545	99	773	321	1193	99	329	20	448
Site Generated Traffic			1	1	5			5	1	23	6	30		19		19
Future Total Traffic	32	123	36	191	211	232	107	550	100	796	327	1223	99	348	20	467

US 301 / County Line Rd.

Afternoon Peak-Hour Volumes	EASTBOUND County Line Rd.				WESTBOUND County Line Rd.				NORTHBOUND US 301				SOUTHBOUND US 301			
	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups
Existing (2014)	2	0	6	8	1	1	68	70	5	1105	3	1113	20	518	6	544
- Peak Hour Factor	0.50		0.50	0.50	0.25	0.25	0.81	0.80	0.63	0.92	0.75	0.92	0.56	0.99	0.75	0.96
- Movement/Lane Group %	25.0%		75.0%	100%	1.4%	1.4%	97.1%	100%	0.4%	99.3%	0.3%	100%	3.7%	95.2%	1.1%	100%
- Heavy Vehicles %	0.0%		0.0%	2%	0.0%	0.0%	0.0%	2%	0.0%	3.3%	0.0%	3%	5.0%	5.8%	0.0%	6%
Future Background	9				75				1129				581			
- Movement/Lane Group	2	0	7	9	1	1	73	75	5	1121	3	1129	21	553	6	581
Site Generated Traffic	30		33	63				0	28			28			25	25
Future Total Traffic	32	0	40	72	1	1	73	75	33	1121	3	1157	21	553	31	606

US 301 / CR 466

Afternoon Peak-Hour Volumes	EASTBOUND CR 466				WESTBOUND CR 466				NORTHBOUND US 301				SOUTHBOUND US 301			
	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups
Existing (2014)	30	177	44	251	376	269	304	949	99	701	394	1194	166	321	29	516
- Peak Hour Factor	0.75	0.76	0.73	0.81	0.92	0.96	0.96	0.95	0.77	0.92	0.90	0.91	0.81	0.87	0.73	0.89
- Movement/Lane Group %	12.0%	70.5%	17.5%	100%	39.6%	28.3%	32.0%	100%	8.3%	58.7%	33.0%	100%	32.2%	62.2%	5.6%	100%
- Heavy Vehicles %	0.0%	0.0%	20.5%	4%	3.2%	2.2%	0.7%	2%	7.1%	4.6%	1.0%	4%	1.8%	8.4%	6.9%	6%

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ESRP CORPORATION
Traffic Volumes at Intersections



Project Name: **Track & Card Room - Phase 2B**
Jurisdiction: **Marion County**

US 301 / CR 42

Afternoon Peak-Hour Volumes	EASTBOUND CR 42				WESTBOUND CR 42				NORTHBOUND US 301				SOUTHBOUND US 301			
	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups
Existing (2014)	32	122	35	189	205	231	106	542	93	724	301	1118	97	322	20	439
- Peak Hour Factor	0.80	0.85	0.73	0.89	0.85	0.93	0.88	0.96	0.86	0.95	0.84	0.94	0.81	0.95	0.63	0.93
- Movement/Lane Group %	16.9%	64.6%	18.5%	100%	37.8%	42.6%	19.6%	100%	8.3%	64.8%	26.9%	100%	22.1%	73.3%	4.6%	100%
- Heavy Vehicles %	3.1%	1.6%	0.0%	2%	3.9%	0.4%	0.9%	2%	0.0%	4.4%	2.3%	3%	1.0%	5.9%	5.0%	5%
Future Background	193				553				1472				476			
- Movement/Lane Group	33	125	36	193	209	236	108	553	122	953	396	1472	105	349	22	476
Site Generated Traffic			2	2	10			10	2	37	10	49		38		38
Future Total Traffic	33	125	38	195	219	236	108	563	124	990	406	1521	105	387	22	514

US 301 / County Line Rd.

Afternoon Peak-Hour Volumes	EASTBOUND County Line Rd.				WESTBOUND County Line Rd.				NORTHBOUND US 301				SOUTHBOUND US 301			
	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups
Existing (2014)	2	0	6	8	1	1	68	70	5	1105	3	1113	20	518	6	544
- Peak Hour Factor	0.50		0.50	0.50	0.25	0.25	0.81	0.80	0.63	0.92	0.75	0.92	0.56	0.99	0.75	0.96
- Movement/Lane Group %	25.0%		75.0%	100%	1.4%	1.4%	97.1%	100%	0.4%	99.3%	0.3%	100%	3.7%	95.2%	1.1%	100%
- Heavy Vehicles %	0.0%		0.0%	2%	0.0%	0.0%	0.0%	2%	0.0%	3.3%	0.0%	3%	5.0%	5.8%	0.0%	6%
Future Background	10				84				1137				710			
- Movement/Lane Group	3	0	8	10	1	1	82	84	5	1129	3	1137	26	676	8	710
Site Generated Traffic	50		53	103				0	54			54			51	51
Future Total Traffic	53	0	61	113	1	1	82	84	59	1129	3	1191	26	676	59	761

US 301 / CR 466

Afternoon Peak-Hour Volumes	EASTBOUND CR 466				WESTBOUND CR 466				NORTHBOUND US 301				SOUTHBOUND US 301			
	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups
Existing (2014)	30	177	44	251	376	269	304	949	99	701	394	1194	166	321	29	516
- Peak Hour Factor	0.75	0.76	0.73	0.81	0.92	0.96	0.96	0.95	0.77	0.92	0.90	0.91	0.81	0.87	0.73	0.89
- Movement/Lane Group %	12.0%	70.5%	17.5%	100%	39.6%	28.3%	32.0%	100%	8.3%	58.7%	33.0%	100%	32.2%	62.2%	5.6%	100%
- Heavy Vehicles %	0.0%	0.0%	20.5%	4%	3.2%	2.2%	0.7%	2%	7.1%	4.6%	1.0%	4%	1.8%	8.4%	6.9%	6%

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ESRP CORPORATION
Traffic Volumes at Intersections



Project Name: **Track & Card Room - Phase 3**
Jurisdiction: **Marion County**

US 301 / CR 42

Afternoon Peak-Hour Volumes	EASTBOUND CR 42				WESTBOUND CR 42				NORTHBOUND US 301				SOUTHBOUND US 301			
	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups
Existing (2014)	32	122	35	189	205	231	106	542	93	724	301	1118	97	322	20	439
- Peak Hour Factor	0.80	0.85	0.73	0.89	0.85	0.93	0.88	0.96	0.86	0.95	0.84	0.94	0.81	0.95	0.63	0.93
- Movement/Lane Group %	16.9%	64.6%	18.5%	100%	37.8%	42.6%	19.6%	100%	8.3%	64.8%	26.9%	100%	22.1%	73.3%	4.6%	100%
- Heavy Vehicles %	3.1%	1.6%	0.0%	2%	3.9%	0.4%	0.9%	2%	0.0%	4.4%	2.3%	3%	1.0%	5.9%	5.0%	5%
Future Background	195				558				1638				495			
- Movement/Lane Group	33	126	36	195	211	238	109	558	136	1061	441	1638	109	363	23	495
Site Generated Traffic			3	3	17			17	3	57	16	76		62		62
Future Total Traffic	33	126	39	198	228	238	109	575	139	1118	457	1714	109	425	23	557

US 301 / County Line Rd.

Afternoon Peak-Hour Volumes	EASTBOUND County Line Rd.				WESTBOUND County Line Rd.				NORTHBOUND US 301				SOUTHBOUND US 301			
	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups
Existing (2014)	2	0	6	8	1	1	68	70	5	1105	3	1113	20	518	6	544
- Peak Hour Factor	0.50		0.50	0.50	0.25	0.25	0.81	0.80	0.63	0.92	0.75	0.92	0.56	0.99	0.75	0.96
- Movement/Lane Group %	25.0%		75.0%	100%	1.4%	1.4%	97.1%	100%	0.4%	99.3%	0.3%	100%	3.7%	95.2%	1.1%	100%
- Heavy Vehicles %	0.0%		0.0%	2%	0.0%	0.0%	0.0%	2%	0.0%	3.3%	0.0%	3%	5.0%	5.8%	0.0%	6%
Future Background	11				94				1169				790			
- Movement/Lane Group	3	0	8	11	1	1	91	94	5	1161	3	1169	29	752	9	790
Site Generated Traffic	76		83	159				0	90			90			84	84
Future Total Traffic	79	0	91	170	1	1	91	94	95	1161	3	1259	29	752	93	874

US 301 / CR 466

Afternoon Peak-Hour Volumes	EASTBOUND CR 466				WESTBOUND CR 466				NORTHBOUND US 301				SOUTHBOUND US 301			
	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups	LT	TH	RT	All Lane Groups
Existing (2014)	30	177	44	251	376	269	304	949	99	701	394	1194	166	321	29	516
- Peak Hour Factor	0.75	0.76	0.73	0.81	0.92	0.96	0.96	0.95	0.77	0.92	0.90	0.91	0.81	0.87	0.73	0.89
- Movement/Lane Group %	12.0%	70.5%	17.5%	100%	39.6%	28.3%	32.0%	100%	8.3%	58.7%	33.0%	100%	32.2%	62.2%	5.6%	100%
- Heavy Vehicles %	0.0%	0.0%	20.5%	4%	3.2%	2.2%	0.7%	2%	7.1%	4.6%	1.0%	4%	1.8%	8.4%	6.9%	6%

APPENDIX 7











SYNCHRO REPORTS
(Future Conditions)

ATTACHMENT G_Traffic Report_2014

Queues

Total Traffic - Phase 2A

6: US 301 & CR 42




















										
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	33	163	215	237	109	102	812	334	101	375
v/c Ratio	0.15	0.37	0.78	0.53	0.24	0.17	0.47	0.35	0.25	0.23
Control Delay	29.9	30.0	54.6	36.6	6.7	10.3	20.2	3.4	10.9	16.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.9	30.0	54.6	36.6	6.7	10.3	20.2	3.4	10.9	16.9
Queue Length 50th (ft)	16	78	126	130	0	24	180	0	23	70
Queue Length 95th (ft)	41	133	209	201	39	60	302	56	59	123
Internal Link Dist (ft)		11698		10792			8005			550
Turn Bay Length (ft)	330		280			575		575	535	
Base Capacity (vph)	416	839	530	859	789	600	1725	955	449	1607
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.19	0.41	0.28	0.14	0.17	0.47	0.35	0.22	0.23
Intersection Summary										

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HCM Unsignalized Intersection Capacity Analysis

Total Traffic - Phase 2A

10: US 301 & Site Access Rd./County Line Rd.











												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	32	0	40	1	1	73	33	1121	3	21	553	31
Sign Control		Stop			Stop			Free				Free
Grade		0%			0%			0%				0%
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	33	0	42	1	1	76	34	1168	3	22	576	32
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
Raised												
Median storage (veh)												
2												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1365	1876	304	1611	1890	585	608			1171		
vC1, stage 1 conf vol	636	636		1238	1238							
vC2, stage 2 conf vol	729	1240		373	652							
vCu, unblocked vol	1365	1876	304	1611	1890	585	608			1171		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.2		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	86	100	94	99	99	83	96			96		
cM capacity (veh/h)	240	196	692	170	207	454	966			576		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3				
Volume Total	75	78	34	778	392	22	384	224				
Volume Left	33	1	34	0	0	22	0	0				
Volume Right	42	76	0	0	3	0	0	32				
cSH	377	437	966	1700	1700	576	1700	1700				
Volume to Capacity	0.20	0.18	0.04	0.46	0.23	0.04	0.23	0.13				
Queue Length 95th (ft)	18	16	3	0	0	3	0	0				
Control Delay (s)	16.9	15.0	8.9	0.0	0.0	11.5	0.0	0.0				
Lane LOS	C	C	A			B						
Approach Delay (s)	16.9	15.0	0.3			0.4						
Approach LOS	C	C										
Intersection Summary												
Average Delay			1.5									
Intersection Capacity Utilization			48.6%		ICU Level of Service				A			
Analysis Period (min)			15									

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Queues

Total Traffic - Phase 2B




















6: US 301 & CR 42

										
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	34	167	223	241	110	127	1010	414	107	417
v/c Ratio	0.15	0.37	0.79	0.53	0.23	0.22	0.63	0.43	0.35	0.26
Control Delay	29.5	29.6	54.8	36.1	6.5	11.1	24.3	3.7	12.9	17.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.5	29.6	54.8	36.1	6.5	11.1	24.3	3.7	12.9	17.7
Queue Length 50th (ft)	17	79	133	132	0	31	247	0	25	80
Queue Length 95th (ft)	41	135	218	204	39	75	408	62	64	141
Internal Link Dist (ft)		11698		10792			8005			550
Turn Bay Length (ft)	330		280			575		575	535	
Base Capacity (vph)	414	830	522	850	782	570	1605	954	354	1589
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.20	0.43	0.28	0.14	0.22	0.63	0.43	0.30	0.26
Intersection Summary										

ATTACHMENT G_Traffic Report_2014

HCM Unsignalized Intersection Capacity Analysis

Total Traffic - Phase 2B
10: US 301 & Site Access Rd./County Line Rd.











												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	53	0	61	1	1	82	59	1129	3	26	676	59
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	55	0	64	1	1	85	61	1176	3	27	704	61
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								Raised			Raised	
Median storage (veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1586	2091	383	1770	2120	590	766			1179		
vC1, stage 1 conf vol	789	789		1301	1301							
vC2, stage 2 conf vol	797	1302		470	820							
vCu, unblocked vol	1586	2091	383	1770	2120	590	766			1179		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.2		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	71	100	90	99	99	81	93			95		
cM capacity (veh/h)	192	166	615	146	175	451	843			571		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3				
Volume Total	119	88	61	784	395	27	469	296				
Volume Left	55	1	61	0	0	27	0	0				
Volume Right	64	85	0	0	3	0	0	61				
cSH	303	432	843	1700	1700	571	1700	1700				
Volume to Capacity	0.39	0.20	0.07	0.46	0.23	0.05	0.28	0.17				
Queue Length 95th (ft)	45	19	6	0	0	4	0	0				
Control Delay (s)	24.3	15.4	9.6	0.0	0.0	11.6	0.0	0.0				
Lane LOS	C	C	A			B						
Approach Delay (s)	24.3	15.4	0.5			0.4						
Approach LOS	C	C										
Intersection Summary												
Average Delay			2.3									
Intersection Capacity Utilization			58.0%		ICU Level of Service			B				
Analysis Period (min)			15									

ATTACHMENT G_Traffic Report_2014

Queues

Total Traffic - Phase III

6: US 301 & CR 42




















										
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	34	169	233	243	111	142	1141	466	111	457
v/c Ratio	0.14	0.36	0.79	0.51	0.23	0.26	0.73	0.48	0.43	0.31
Control Delay	28.4	28.4	52.9	34.4	6.3	11.6	27.6	3.9	15.9	20.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.4	28.4	52.9	34.4	6.3	11.6	27.6	3.9	15.9	20.4
Queue Length 50th (ft)	16	78	135	129	0	36	301	0	27	94
Queue Length 95th (ft)	41	135	225	202	38	85	486	64	68	168
Internal Link Dist (ft)		11698		10792			8005			550
Turn Bay Length (ft)	330		280			575		575	535	
Base Capacity (vph)	438	863	546	885	810	594	1553	966	289	1473
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.20	0.43	0.27	0.14	0.24	0.73	0.48	0.38	0.31
Intersection Summary										

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HCM Unsignalized Intersection Capacity Analysis

Total Traffic - Phase III

10: US 301 & Site Access Rd./County Line Rd.





















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	79	0	91	1	1	91	95	1161	3	29	752	93
Sign Control		Stop			Stop			Free				Free
Grade		0%			0%			0%				0%
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	82	0	95	1	1	95	99	1209	3	30	783	97
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								Raised			Raised	
Median storage (veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1790	2303	440	1956	2349	606	880			1212		
vC1, stage 1 conf vol	892	892		1409	1409							
vC2, stage 2 conf vol	898	1410		547	941							
vCu, unblocked vol	1790	2303	440	1956	2349	606	880			1212		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.2		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	44	100	83	99	99	78	87			95		
cM capacity (veh/h)	147	133	565	114	137	440	764			555		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3				
Volume Total	177	97	99	806	406	30	522	358				
Volume Left	82	1	99	0	0	30	0	0				
Volume Right	95	95	0	0	3	0	0	97				
cSH	244	417	764	1700	1700	555	1700	1700				
Volume to Capacity	0.73	0.23	0.13	0.47	0.24	0.05	0.31	0.21				
Queue Length 95th (ft)	125	22	11	0	0	4	0	0				
Control Delay (s)	51.0	16.2	10.4	0.0	0.0	11.9	0.0	0.0				
Lane LOS	F	C	B			B						
Approach Delay (s)	51.0	16.2	0.8			0.4						
Approach LOS	F	C										
Intersection Summary												
Average Delay			4.8									
Intersection Capacity Utilization			62.1%		ICU Level of Service					B		
Analysis Period (min)			15									

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HCM Unsignalized Intersection Capacity Analysis

Total Traffic - Phase III (Improved)

10: US 301 & Site Access Rd./County Line Rd.

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	79	0	91	1	1	91	95	1161	3	29	752	93
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	82	0	95	1	1	95	99	1209	3	30	783	97
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								Raised			Raised	
Median storage (veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1790	2303	440	1956	2349	606	880			1212		
vC1, stage 1 conf vol	892	892		1409	1409							
vC2, stage 2 conf vol	898	1410		547	941							
vCu, unblocked vol	1790	2303	440	1956	2349	606	880			1212		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.2		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	44	100	83	99	99	78	87			95		
cM capacity (veh/h)	147	133	565	114	137	440	764			555		
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3			
Volume Total	82	95	97	99	806	406	30	522	358			
Volume Left	82	0	1	99	0	0	30	0	0			
Volume Right	0	95	95	0	0	3	0	0	97			
cSH	147	565	417	764	1700	1700	555	1700	1700			
Volume to Capacity	0.56	0.17	0.23	0.13	0.47	0.24	0.05	0.31	0.21			
Queue Length 95th (ft)	70	15	22	11	0	0	4	0	0			
Control Delay (s)	56.6	12.7	16.2	10.4	0.0	0.0	11.9	0.0	0.0			
Lane LOS	F	B	C	B			B					
Approach Delay (s)	33.1		16.2	0.8			0.4					
Approach LOS	D		C									
Intersection Summary												
Average Delay			3.5									
Intersection Capacity Utilization			56.6%		ICU Level of Service					B		
Analysis Period (min)			15									